# EPA Registration File 67690-30 Vol. 1



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

December 2, 2004

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

MR. STEVE COCKREHAM
SEPRO CORP
11550 N. MERIDIAN ST SUITE 600
CARMEL, IN 46032

Dear Mr. Cockreham:

Subject:

Transfer of Pesticide Registrations and Data From Company Number 1812 to

Company Number 67690

Pursuant to your request in your letter and transfer agreement of August 17, 2004 and subsequent information received November 9, 2004, we have approved the transfer of the following registrations and data from GRIFFIN L.L.C., company number 1812 to SEPRO CORP, company number 67690.

The effective date of these changes is the date of this letter.

	Old EPA	New EPA
Registered Products	Reg. No.	Reg. No.
K-POOL ALGAECIDE	1812-302	67690-23
K-TEA ALGAECIDE	1812-307	67690-24
KOMEEN	1812-312	67690-25
SPIN OUT	1812-346	67690-26
SPIN OUT 300	1812-357	67690-27
SPIN OUT SPRAY	1812-394	67690-28
SPIN OUT 260	1812-396	67690-29
FLURIDONE SC	1812-435	67690-30
FLURIDONE TECHNICAL	1812-436	67690-31
FLURIDONE SRP	1812-447	67690-32
	Old EPA	New EPA
Pending Registered Products	File Symbol	File Symbol
SPIN OUT NURSERY CONTAINERS	1812-ULO	67690-GG

Guy Ovi; 229-293-1812-435 E-Wail -120 754,322 1596391-128 You should indicate the new company designation, new EPA Registration Number and new Establishment Number (if it has changed) on the labeling at the next printing which should occur no later than 18 months after the effective date of this transfer. After 18 months, any product released for shipment must bear the new Registration Number and Establishment Number. If you intend to use the labels which currently appear on the transferor's product after the effective date of the transfer, but within the 18 month grace period, you must maintain complete and accurate records which identify by batch number, lot number, or other suitable description the quantities of such product bearing the transferor's label. Each container or package bearing the transferor's label which is released after the effective date of product registration transfer, must be clearly and accurately marked with the batch number, lot number or other descriptive designation used to identify the product in your records.

Supplemental distribution agreements of registered products do not transfer with the Section 3 registration. It is your responsibility as the registrant to notify any and all supplemental distributors of the transferred product(s) of this transfer agreement. If you wish to enter into supplemental distribution agreements of your product(s) under this new registration, the form "Notice of Supplemental Distribution of a Registered Pesticide Product," EPA Form 8570-5, must be submitted to the Agency for each supplemental distributorship.

You are required to contact your local EPA Regional Office to determine what effect this transfer of pesticide registrations has on the pesticide production establishment registration.

It will not be necessary to submit labeling for review if the only changes are in the company designation and the EPA Registration Number. Other changes in the product and/or labeling may require EPA review and approval prior to initiation. In any correspondence on these products always refer to the U.S. EPA Registration Number listed above.

The transferred registration will have the same status under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, 7 USC 136 et seq., as it had prior to the approval of this transfer.

When registrations are transferred from one company to a second company, all restrictions, data requirements, conditions (suspensions), and deadlines existing on the registrations are transferred with the registrations. The new company is responsible for adhering to or complying with all such restrictions, etc. on the acquired products.

In regard to deadlines, the transferee company is responsible for submitting all required data according to the schedules already established for the acquired products. Failure to do so will result in the issuance of a Notice of Intent to Suspend. Requests from transferee companies for additional time to submit, because they acquired the registration(s) after the 3(c)(2)(B) request was issued will not be granted. If a transferee company has other valid reasons for delays in the testing which were clearly outside of their control, then such requests for time extensions will be considered in accordance with the established procedures. Transfers occurring while a 3(c)(2)(B) request is being issued or during the 90-day response time are subject to the same conditions expressed above.

Registration is in no way to be construed as an endorsement or approval of these products by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with FIFRA.

Furthermore, the transfer of the subject registrations is approved under the condition that the annual maintenance fee obligation has been fully satisfied. The marginal maintenance fee is determined based solely on the total number of active section 3 and section 24(c) registrations held by the transferor. If the annual maintenance fee has not been fully satisfied, the transferee and transferor will be notified to comply within a specified time period or the affected registrations may be canceled.

The Agency acknowledges it has received a request for data transfer dated August 17, 2004 and subsequent information received on November 9, 2004 to transfer data ownership from the transferor to the transferee. The data transfer is effective the date of this letter. After this date SEPRO CORP will be considered the data owner. This action will not automatically reflect on the Data Submitters List. If you want to be added to the Data Submitters List, you must submit a request to:

Document Processing Desk (DSL)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

By copy of this letter we are informing the transferor of these changes. If you have any questions about this transfer approval please contact Alexandra Zikely at (703) 305-6603.

Sincerely,

Kate Bouve', Cheif

Information Services Branch

Kate Bowe

Information Resources & Services Div. (7504C)

CC: MS. PRISCILA VANSETTI
DUPONT CROP PROTECTION/STINE-HASKELL RESEARCH CENTER,
AGENT FOR
GRIFFIN L.L.C.
1090 ELKTON ROAD, PO BOX 30
NEWARK, DE 19714-0030



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

FEB 2 7 2004

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

P. Leanne Pruett Griffin L.L.C. P.O. Box 1847 Valdosta, GA 31603-1847

Dear Ms. Pruett:

Subject: Add New Uses in Slow Moving or Quiescent Rivers, Streams and Creeks

Fluridone SC

EPA Registration No. 1812-435

Your Submission Dated January 22, 2004

We cannot process the application for registration. Our review of the cited "metoo" fluridone products indicate that the active ingredient (ai) is registered for use only in fresh water ponds, lakes, reservoirs, drainage canals, irrigation canals and static or moving rivers. Any new aquatic sites other than those listed will require scientific review to assure the human drinking water residues are safe and that there will be no unreasonable adverse affect to the environment.

If you wish to pursue registration to expand fluridone use into streams and creeks, you must submit a data listing of all the data required by 40 CFR Part 158 to support the new uses. For each requirement you must submit or cite a valid study.

Please note that we have not determined if "slow moving or quiescent rivers" is the same as "static or moving rivers". We may decide they are the same if the directions for use are identical to a currently registered fluridone product.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

151

Joanne I. Miller
Product Manager (23)
Herbicide Branch
Registration Division (7505C)



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

February 11, 2004

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

P. LEANNE PRUETT GRIFFIN L.L.C. PO Box 1847 VALDOSTA, GA 31603-1847

PRODUCT NAME: FLURIDONE SC COMPANY NAME: GRIFFIN L.L.C.

EPA FILE SYMBOL: 1812-435 EPA RECEIPT DATE: 02/06/04

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Registration Division, Risk Management Team 23, at (703) 305-6224.

Sincerely,

2 wrice

Front End Processing Staff

Information Services Branch

Information Resources and Services Division

Lase read instructions on reverse before co							
SEPA Environme	United States  ntal Protection Vashington, DC 20-			v	Registra Amend Other	ation	OPP Identifier Number
	Application	on for P	esticide - Sec	tion	l		
1. Company/Product Number 1812 - 435			2. EPA Product Man Joanne I. Miller	ager		3. Pi	roposed Classification
4. Company/Product (Name) Fluridone SC			<b>PM#</b> 23				
5. Name and Address of Applicant (Include 2) Griffin LLC P. O. Box 1847 Valdosta, GA 31601 Check if this is a new address			•	is sim	ilar or iden 67690-4	tical in co	
		Sect	ion - II				
Amendment - Explain below.  Resubmission in response to Agency in Notification - Explain below.  Explanation: Use additional page(s) if necessary in Notification - Supplemental Label in Notificati	essary. (For section	n I and Sec		ter dati Applica Ilain be	ed ition. low.	e to	
		Secti	on - III				
Material This Product Will Be Packaged In:		0001					
Child-Resistant Packaging  Yes  No  Pertification must  By a submitted  Unit Packaging  If "Yes" Unit Packaging	No. per		No. per	r	2. Type of	Container  Metel Plastic Glass Paper Other (S	
3. Location of Net Contents Information  Label Container	4. Size(s) Ret	tail Contain	ər	5. Loc	ation of Lal	pel Directio	ons
6. Manner in Which Label is Affixed to Produc	Lithog Paper Stence	raph glued	Other				
	· · · · · · · · · · · · · · · · · · ·	<u></u>	on - IV				••••
1. Cantact Point   (Complete items directly be	low for identificatio	n of individ	ual to be contacted,	if nece	ssary, to pi	ocess this	application.)
Name P. Leanne Pruett		Title Sr. Regist	tration Specialist				e No. (include Area Code) 7-3995, Ext. 1108
I certify that the statements I have made to acknowledge that any knowlingly fals both under applicable law.	e or misleading sta	all attachm					6. Date Application Received (Stamped)
2. Signature	1	J. 1100					2000

Sr. Registration Specialist

Janaury 22, 2004

5. Date

4. Typed Name

P. Leanne Pruett

Joanne Miller



January 22, 2004

Office of Pesticide Programs
U. S. Environmental Protection Agency
Document Processing Desk
ATTN: Joanne Miller, PM #23
Herbicide Branch (7505C)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington, DC 20460

RE: Supplemental Label for Fluridone SC (EPA Reg. No. 1812-435)

Addition of Use Sites: Slow Moving or Quiescent Rivers, Streams and Creeks

Dear Ms. Miller:

Enclosed, please find an amendment application for **Fluridone SC** (EPA Reg. No. 1812-435). The purpose of this application is to add directions for use for additional use sites, namely slow moving or quiescent rivers, streams and creeks. Please note that these use sites currently appear on our fluridone product, Fluridone SRP, EPA Reg. No. 1812-447. In addition, this use language is identical or substantially similar to language for a Florida SLN held by SePRO Corporation for Sonar AS (EPA Reg. No. 67690-4) Note also that rates associated with these proposed uses do not exceed any existing application rates.

In support of this application, the following documentation has been submitted:

- EPA form 8570-1, Application for Pesticide Amendment
- Five copies of supplemental product labeling

If you have any questions or concerns regarding this application, please contact me at (800) 737-3995, ext. 1108.

Best Regards,

P. Leanne Pruett

Sr. Registration Specialist

Encl.

#### FLURIDONE SC AQUATIC HERBICIDE EPA Reg. No. 1812-435

#### FOR USE IN SLOW MOVING OR QUIESCENT RIVERS, STREAMS AND CREEKS

#### Directions For Use:

It is a violation of Federal Law to use this product in a manner inconsistent with it's labeling.

#### Application Directions:

For control of hydrilla (*Hydrilla verticillata*), apply Fluridone SC at rates shoen in the following table:

Average Water Depth of	Quarts of Fluridone SC per
Treatment Site (feet)	Treated Surface Acre
1	0.4
2	0.8
3	1.2
4	1.5
5 or greater	2.0

In moving water, use an application pattern that will provide uniform distribution and avoid concentration of the herbicide. Fluridone SC may be diluted with water and the concentrated mix metered into the pumping system. In rivers, do nto directly apply Fluridone SC within ¼ mile (1320 feet) of any functioning potable water intake.

#### Irrigation:

Irrigation with Fluridone SC treated water may result in injury to the irrigated vegetation. Griffin recommends informing those who irrigate from Fluridone SC treated areas of the irrigation time frames presented in the table below. These time frames are suggestions which should be followed to reduce the potential for injury to vegetation irrigated with Fluridone SC treated water:

		Days After	Application	
Application Site	Established Tree Crops	Established Row Crops / Turf / Plants	Newly Seeded Crops / Seedbeds or Areas to be Planted Included Overseeded Golf Course Greens	
Slow Moving or Quiescent Rivers, reams and Creeks	7	14	14	

#### **IMPORTANT:**

#### FLURIDONE SC AQUATIC HERBICIDE EPA Reg. No. 1812-435

#### FOR USE IN SLOW MOVING OR QUIESCENT RIVERS, STREAMS AND CREEKS

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#### IMPORTANT:

#### FLURIDONE SC AQUATIC HERBICIDE EPA Reg. No. 1812-435

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#### IMPORTANT:

#### FLURIDONE SC AQUATIC HERBICIDE EPA Reg. No. 1812-435

#### FOR USE IN SLOW MOVING OR QUIESCENT RIVERS, STREAMS AND CREEKS

#### **Directions For Use:**

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Slow Moving or Quiescent Rivers, Streams and Creeks	7	14	14	

#### IMPORTANT:



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OCT 1 2003

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

W.A. Hawkins, Jr. Ph.D. Griffin L.L.C. P.O. Box 1847 Valdosta, GA 31603-1847

Dear Dr. Hawkins:

Subject:

Alternate Formula

Fluridone SC

EPA Registration No. 1812-435

Your Submission Dated June 6, 2003

The submitted alternate formula is not acceptable. Submit a revised Confidential Statement of Formula (CSF) with the following corrections:

- Request your supplier to submit to this office the complete chemical composition. CAS Registry Number, and percentage of components in the formulation for referencing this product's brand name and EPA registration number.
- 2. "Best Source" is inadequate. You must list each supplier for each deliberately added component. If there is not enough room on the CSF, add the list of suppliers as an appendix to the CSF.
- 3. The lower certified limit of a deliberately added component can not be 0.0%. Specify a lower certified limit. If a component is not added for certain formulations, you must submit a separate alternate CSF for each different formulation produced.
  - 4. According to our records for

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505C)

anne I. Miller

\*Inert ingredient information may be entitled to confidential treatment\*

09/24/03

DP BARCODE No.: D292574 EPA REG. NO.:1812-435

PRODUCT NAME: FLURIDONE SC

PC Codes
Decision No.

112900

FOOD USE

327728

COMPANY:

[] GRIFFIN L.L.C.

FROM:

Undira Gairola, Chemist Product Chemistry Team

Technical Review Branch/RD (7505C)

TO:

Joanne Miller PM 23

Herbicide Branch/RD(7505C)

INTRODUCTION:

GRIFFIN L.L.C. has submitted an alternate CSF dated 06/05/03.

SUMMARY OF FINDINGS:

GRIFFIN L.L.C. submitting alternate CSF dated 06/05/03 for subject product FLURIDONE SC. The submitted CSF for the subject product was reviewed and details will be discussed as follows:

- The alternate CSF dated 06/05/03. agrees with the label claim of 41.7 % of the active Ingredient Fluridone.
- 2. Additional information is required for
- 3. Lower certified limits for unacceptable and need to be corrected.
- 4 Certified limits for all the inert ingredients are not in compliance as per 40CFR§158.175 (b)(2). These limits need to be revised.
- 5. Correction is required for CAS Reg. No. for
- 6. The alternate CSF dated 06/05/03. is unacceptable on account of the above reasons.

Please refer to the CONFIDENTIAL APPENDIX FOR DETAILS.

#### CONCLUSIONS:

TRB has reviewed the submitted alternate CSF dated 06/05/03. for the above mentioned subject

end-use product and has concluded that:

1. The alternate CSF dated 06/05/03 is unacceptable . Please refer to findings #2 , 3, 4, and #5 of the summary of findings

#### CONFIDENTIAL APPENDIX FOR DETAILS.

**DP BARCODE No.: D292574 EPA REG. NO.:1812-435** 

PRODUCT NAME: FLURIDONE SC

PC Codes

112900

Decision No.

327728

FOOD USE

[]

COMPANY: G

GRIFFIN L.L.C.

Name of the inert with incorrect CAS Reg. No.

2. Name of the unacceptable inert:

Information required:

Need specific chemical name with CAS. Reg. No. of



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

June 12, 2003

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

CAROL PATTERSON GRIFFIN L.L.C. PO Box 1847 VALDOSTA, GA 31603-1847

PRODUCT NAME: FLURIDONE SC COMPANY NAME: GRIFFIN L.L.C.

**OPP IDENTIFICATION NUMBER: 300284** 

EPA FILE SYMBOL: 1812-435 EPA RECEIPT DATE: 06/09/03

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Registration Division, Risk Management Team 23, at (703) 305-6224.

Sincerely,

2 Write

Front End Processing Staff

Information Services Branch

Information Resources and Services Division





VIA UPS NEXT DAY AIR

June 4, 2003

Ms. Joanne I. Miller
Document Processing Desk (AMEND)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Room 255A, Crystal Mall 2
1921 Jefferson Davis Highway
Arlington, Virginia 22202-4901

Dear Ms. Miller:

SUBJECT: FLURIDONE SC (EPA REG. NO. 1812-435)
AMENDMENT – ALTERNATIVE FORMULATION

Enclosed is a Confidential Statement of Formula dated June 5, 2003 for an alternative formulation of Griffin's Fluridone SC (EPA Reg. No. 1812-435). The CSF has been amended to add in order to improve product performance. MSDSs of representative are enclosed.

Should you require any additional information, please contact me at 229-293-4242, Extension 1104.

GRIFFIN L.L.C.

W. A. Hawkins, Jr., Ph.D.

Senior Registration Manager,

Copper Products, Insecticides and State Affairs

\*Inert ingredient information may be entitled to confidential treatment\* instructions on reverse before completing form. Form Approved, OMB No. 2070-0060, Approval expires 2-28-95 OPP Identifier Number Registration United States **Environmental Protection Agency** Amendment 300284 Washington, DC 20460 Other Application for Pesticide - Section I 2. EPA Product Manager 1. Company/Product Number 3. Proposed Classification 1812 - 435 Joanne Miller None Restricted 4. Company/Product (Name) PM# Fluridone SC 23 5. Name and Address of Applicant (Include ZIP Code) 6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling Griffin L.L.C. P. O. Box 1847 EPA Reg. No. Valdosta, GA 31603-1847 Check if this is a new address **Product Name** Section - II Amendment - Explain below. Final printed labels in repsonse to Agency letter dated "Me Too" Application. Resubmission in response to Agency letter dated Notification - Explain below. Other - Explain below. Explanation: Use additional page(s) if necessary. (For section I and Section II.) Alternative formulation to include two additional inert ingredients and delete nert ingredient Section - III 1. Material This Product Will Be Packaged In: Child-Resistant Packaging Unit Packaging Water Soluble Packaging 2. Type of Container Yes Yes Metal Yas Plastic No No No Glass Paper If "Yes" No. per No. per Certification must Unit Packaging wgt. container Package wgt container Other (Specify) be submitted 3. Location of Net Contents Information 4. Size(s) Retail Container 5. Location of Label Directions Container 6. Manner in Which Label is Affixed to Product Lithograph Paper glued Stenciled Section - IV 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.) Name Title Telephone No. (Include Area Code) 229-293-4242, Ext. 1104 W. A. Hawkins, Jr., Ph.D. Senior Registration Manager 6. Date Application Certification



Jacket



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

W.A. Hawkins Ph.D. Griffin Corporation P.O. Box 1847 Valdosta, GA 31603-1847

JUN 17 2003

Dear Dr. Hawkins:

Subject:

Revised Labeling

Fluridone SC

EPA Registration No. 1812-435

Your Submission Dated May 27, 2003

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended is acceptable provided that you submit one (1) copy of your final printed labeling before you release the product for shipment.

A stamped copy of the labeling is enclosed for your records.

Assure that "AvasTest" that is specified on your label gives equivalent results as "FasTEST" which is specified on the cited registered me-too product.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505C)

sanne & miller

Enclosure

05/23/03

Active Ingredient

#### FLURIDONE SC AQUATIC HERBICIDE



Under the Federal Insecticide. Fungicide, and Rodenticide Act. as amended, for the pesticide registered under

Fluridone:	1810
1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1H)-pyridinone	41.7%
Inert Ingredients	58.3%
Total	100.0%

Contains 4 pounds of fluridone per gallon.

A herbicide for management of aquatic vegetation in fresh water ponds, lakes, reservoirs, potable water sources, drainage canals and irrigation canals.

#### KEEP OUT OF REACH OF CHILDREN **CAUTION - PRECAUCION**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail).

#### STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

HF SWALLOWED: Call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

	FIRST AID
IF IN EYES:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> </ul>
	<ul> <li>Remove contact lenses, if present, after the first five minutes, then continue rinsing eye.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING:	• Rinse skin immediately with plenty of water for 15 to 20 minutes.
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
IF SWALLOWED:	<ul> <li>Call a poison control center or doctor immediately for treatment advice.</li> </ul>
	• Have person sip a glass of water if able to swallow.
	<ul> <li>Do not induce vomiting unless told to do so by the poison control center or doctor.</li> </ul>
	• Do not give anything by mouth to an unconscious person.

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IF INHALED: • Move person to fresh air:			
	• If person is not breathing, call 911 or an ambulance, then give artificial		
1	respiration, preferably mouth-to-mouth, if possible.		
	Call a poison control center or doctor for further treatment advice.		
	ntainer or label with you when calling a poison control center or doctor, or going for lical emergencies involving this product, call toll free 1-888-324-7598.		
See Label for Addit	onal Precautions and Directions for Use.		

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[END OF FRONT PANEL]

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## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin or inhaled. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

Follow use directions carefully so as to minimize adverse effects on nontarget organisms. In order to avoid impact on threatened or endangered aquatic plant or animal species, users must consult their State Fish and Game Agency or the U.S. Fish and Wildlife Service before making applications.

Do not contaminate untreated water when disposing of equipment washwaters. Trees and shrubs growing in water treated with Fluridone SC may occasionally develop chlorosis. Do not apply in tidewater/brackish water.

Lowest rates should be used in shallow areas where the water depth is considerably less than the average depth of the entire treatment site, for example, shallow shoreline areas.

#### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Shake well before using.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**STORAGE:** Store in original container only. Do not store near feed or foodstuffs. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

**PESTICIDE DISPOSAL:** Wastes resulting from use of this product may be used according to label directions or disposed of at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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#### **GENERAL INSTRUCTIONS**

Fluridone SC is a selective systemic aquatic herbicide for management of aquatic vegetation in fresh water ponds, lakes, reservoirs, drainage canals and irrigation canals. Fluridone SC is absorbed from water by plant shoots and from hydrosoil by the roots of aquatic vascular plants. It is important to maintain the recommended concentration of Fluridone SC in contact with the weeds as long as possible target plants for a minimum of 45 days. Rapid water movement or any condition which that results in rapid dilution of Fluridone SC in treated water will reduce its effectiveness.

In susceptible plants, Fluridone SC inhibits the formation of carotene. In the absence of carotene, chlorophyll is rapidly degraded by sunlight. Herbicidal symptoms of Fluridone SC appear in seven to ten days and appear as white (chlorotic) or pink growing points. Under optimum growing conditions, 30 to 90 days are required before the desired level of aquatic weed management is achieved with Fluridone SC. Species susceptibility to Fluridone SC may vary, depending on time of year, stage of growth, and water movement. For best results, apply Fluridone SC prior to initiation of weed growth or when weeds begin active growth. Mature target plants may require higher application rates and may take longer to control.

Fluridone SC is not corrosive to application equipment.

The label provides recommendations on the use of a chemical analysis for the active ingredient. Griffin recommends the use of an Enzyme-Linked Immunoassay (ELISA Test) for the determination of the concentration of active ingredient in treated water. Contact Griffin for the utilization of this test, known as AvasTest<sup>TM</sup>, for the incorporation of this analysis into your treatment program. Other proven chemical analyses for the active ingredient may also be used. The chemical analysis, AvasTest, is referenced in this label as the preferred method for the rapid determination of the active ingredient concentration in treated water.

Application rates are provided in fluid ounces or quarts of Fluridone SC to achieve a desired concentration of the active ingredient in parts per billion (ppb). The maximum application rate or sum of all application rates is 90 ppb in ponds and 150 ppb in lakes and reservoirs per annual growth cycle. This maximum concentration is the amount of product calculated as the target application rate, NOT determined by testing the residues of the active ingredient in the treated water.

#### SPECIAL PRECAUTIONS

- \* Obtain required permits: Permits may be required by state or local agencies. Consult with appropriate State or local water authorities before applying this product.
- \* Chemigation: Do not apply this product through any type of irrigation system.
- \* Hydroponic Farming: Do not use water treated with Fluridone SC for hydroponic

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farming.

- \* Greenhouse and Nursery Plants: Do not use water treated with Fluridone SC for irrigating greenhouse or nursery plants unless use of an approved assay, such as AvasTest, confirms that residues are less than 1 ppb.
- \* Water Use Restrictions Following Applications of Fluridone SC (Days)

Application Rate	Drinking <sup>1</sup>	Fishing	Swimming	Livestock/Pet Consumption	Irrigation <sup>2</sup>
Maximum Rate (150 ppb) or less	0	0	Ö	0	See irrigation instructions below

<sup>&</sup>lt;sup>1</sup> Note below, under Potable Water Intakes, the information for application of Fluridone SC within ¼ mile (1320 feet) of a functional potable water intake.

\* Potable Water Intakes: In lakes and reservoirs or other sources of potable water, DO NOT apply Fluridone SC at application rates greater than 20 ppb within ¼ mile (1320 feet) of any functioning potable water intake. At application rates of 6 to 20 ppb, Fluridone SC may be applied where functioning potable water intakes are present.

**NOTE:** Existing potable water intakes which that are no longer in use, such as those that have been replaced by connections to potable water wells or connections to a municipal water system, are not considered to be functioning potable water intakes.

\* Irrigation: Irrigation with water treated with Fluridone SC may result in injury to the irrigated vegetation. Those who irrigate from areas treated with Fluridone SC should be informed of the irrigation time frames or water assay requirements presented in the table below. These time frames and assay recommendations are suggestions which that should be followed to reduce the potential for injury to vegetation irrigated with water treated with Fluridone SC. There is a greater potential for crop injury when water treated with Fluridone SC is applied to crops grown in low organic and sandy soils.

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<sup>&</sup>lt;sup>2</sup> Note below, under Irrigation, specific time frames or fluridone residues that provide the widest margin of safety for irrigating with water treated with Fluridone SC.

## Recommended Waiting Periods Before Irrigating with Water Treated with Fluridone SC (Days After Application)

Application Site	Established <u>Tree Crops</u>	Established Row Crops/ Turf/Plants	Newly Seeded Crops/Seedbeds or Areas to be Planted, Including Overseeded Golf Course Greens
Ponds and Static Canals <sup>1</sup>	7	30	30 Assay required
Canals	7	14	30 Assay required
Lakes and Reservoirs <sup>2</sup>	7	14	14 Assay required

<sup>&</sup>lt;sup>1</sup> For purposes of Fluridone SC labeling, a pond is defined as a body of water 10 acres or less in size. A lake or reservoir is greater than 10 acres.

Where the use of Fluridone SC treated water is desired for irrigating crops prior to the time frames established above, the use of AvasTest is recommended to measure the concentration in the treated water. Where AvasTest has determined that concentrations are less than 10 parts per billion (ppb), there are no irrigation precautions for irrigating established tree crops, established row crops or turf. For tobacco, tomatoes, peppers or other plants within the Solanaceae family and for newly seeded grasses, such as overseeded golf course greens, do not use Fluridone SC treated water if concentrations are greater than 5 ppb. Furthermore, when rotating crops, do not plant members of the Solanaceae family in land that has been previously irrigated with fluridone concentrations in excess of 5 ppb. It is recommended that an aquatic specialist be consulted prior to commencing irrigation of these sites.

#### WEED CONTROL INFORMATION

Fluridone SC selectivity is dependent upon dosage, time of year, stage of growth, method of application and water movement. The following categories, Controlled, Partially Controlled and Not Controlled, are provided to describe expected efficacy under ideal treatment conditions, using higher to maximum application rates. Use of lower rates will increase selectivity of some species listed as Controlled or Partially Controlled. Additional aquatic plants may be controlled, partially controlled or tolerant to Fluridone SC. Consult an aquatic specialist prior to application to determine a plant's susceptibility to Fluridone SC.

#### Vascular Aquatic Plants Controlled by Fluridone SC

#### **Floating Plants:**

Duckweed, Common (Lemna minor)<sup>†</sup>

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<sup>&</sup>lt;sup>2</sup> In lakes and reservoirs where one-half or greater of the body of water is treated, use the pond and static canal irrigation restrictions precautions.

#### <sup>†</sup>-Controlled only with a surface application of Fluridone SC

#### **Emersed Plants:**

Spatterdock (Nuphar luteum)

Waterlily (Nymphaea spp.)

#### **Submersed Plants:**

Bladderwort (*Utricularia* spp.)

Coontail, Common (Ceratophyllum demersum)

Egeria; Brazilian Elodea (Egeria densa)

Elodea, Common (Elodea canadensis)

Fanwort; Cabomba (Cabomba caroliniana)

Hydrilla (*Hydrilla verticillata*)

Naiad (Najas spp.)

Pondweed (Potamogeton spp.), except Illinois Pondweed

Watermilfoil (Myriophyllum spp.), except Variable-Leaf Milfoil

#### **Shoreline Grasses:**

Paragrass (Brachiaria Urochloa mutica)

#### Vascular Aquatic Plants Partially Controlled by Fluridone SC

Alligatorweed (Alternanthera philoxeroides)

Canarygrass, Reed (Philaris arundinaceae)

Cattail (Typha spp.)

Cutgrass, Giant (Zizaniopsis miliacea)

Lotus, American (Nelumbo lutea)

Pondweed, Illinois (Potamogeton illinoensis)

Parrotfeather (Myriophyllum brasiliense)

Smartweed (Polygonum spp.)

Spikerush (Eleocharis spp.)

Torpedograss (Panicum repens)

Watergrass, Southern (Hydrochloa caroliniensis)

Watermeal, Common (Wolffia columbiana)2

Waterprimrose, Creeping (Ludwigia peploides)

Waterpurslane (Ludwigia palustris)

Watershield (Brasenia schreberi)

#### **Floating Plants:**

Salvinia (Salvinia spp.)

Watermeal, Common (Wolffia columbiana)1

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<sup>&</sup>lt;sup>2-1</sup> Partial control only with a surface application of Fluridone SC applied at the maximum labeled rate.

#### **Emersed Plants:**

Alligatorweed (Alternanthera philoxeroides)

Cattail (Typha spp.)

Lotus, American (Nelumbo lutea)

Parrotfeather (Myriophyllum aquaticum)

Smartweed (Polygonum spp.)

Spikerush (*Eleocharis* spp.)

Waterprimrose, Creeping (Ludwigia peploides)

Waterpurslane (Ludwigia palustris)

Watershield (Brasenia schreberi)

#### **Submersed Plants:**

Limnophila (Limnophila sessiliflora)

Pondweed, Illinois (Potamogeton illinoensis)

Tapegrass: American Eelgrass (Vallisneria americana)

Watermilfoil, Variable-Leaf (Myriophyllum heterophyllum)

#### **Shoreline Grasses:**

Barnyardgrass (Echinochloa crusgalli)

Canarygrass, Reed (Philaris arundinaceae)

Cutgrass, Giant (Zizaniopsis miliacea)

Torpedograss (Panicum repens)

Watergrass, Southern (Hydrochloa caroliniensis)

#### Vascular Aquatic Plants Not Controlled by Fluridone SC

Algae (Chara and Nitella)

Arrowhead (Sagittaria spp.)

Bacopa (Bacopa spp.)

Big Floatingheart; Banana Lily (Nymphoides aquatica)

Bulrush (Scirpus spp.)

Frogbit, American (Limnobium spongia)

Maidencane (Panicum hemitomon)

Pickerelweed; Lanceleaf (Pontederia cordata)

Rush (Juncus spp.)

Tapegrass; American Eelgrass (Vallisneria americana)

Waterhyacinth, Floating (Eichornia crassipes)

Water Lettuce (Pistia stratiotes)

Water Pennywort (Hydrocotyle umbellata)

#### Floating Plants:

Water Lettuce (Pistia stratiotes)

#### **Emersed Plants:**

Arrowhead (Sagittaria spp.)

Bacopa (Bacopa spp.)

Big Floatingheart; Banana Lily (Nymphoides aquatica)

Bulrush (Scirpus spp.)

Frogbit, American (Limnobium spongia)

Pickerelweed; Lanceleaf (Pontederia spp.)

Rush (Juncus spp.)

Waterhyacinth, Floating (Eichornia crassipes)

Water Pennywort (Hydrocotyle umbellata)

#### **Shoreline Grasses:**

Maidencane (Panicum hemitomon)

**NOTE:** Algae (*Chara*, *Nitella* and filimentous species) are not controlled by Fluridone SC.

#### MIXING AND APPLICATION DIRECTIONS

The aquatic plants present in the treatment site should be identified prior to application to determine their susceptibility to Fluridone SC. It is also important to determine the area (acres) to be treated and the average depth in order to select the proper application rate. Do not exceed the maximum labeled rate for a given treatment site per annual growth cycle.

Shake Fluridone SC well before using. Add the recommended amount of Fluridone SC to water in the spray tank during the filling operation. Agitate while filling and during spraying. Surface or subsurface application of the spray can be made with conventional spray equipment. Fluridone SC can also be applied near the surface of the hydrosoil using weighted trailing hoses. A spray volume of 5 to 100 gallons per acre may be used. Fluridone SC may also be diluted with water and the concentrated mix metered into the pumping system.

#### Tank Mix Recommendations

Fluridone SC may be tank mixed with other aquatic herbicides and algaecides to enhance efficacy and plant selectivity. Refer to the label of the companion herbicide or algaecide for use directions, precautions and restrictions.

#### **Application to Ponds**

Fluridone SC may be applied to the entire surface area of a pond. For single applications, rates may be selected to provide 0.06 to 0.09 ppm of active ingredient 45 to 90 ppb in the treated water. Use the higher rate within the rate range where there is a dense weed mass, when treating more difficult to control species, and for ponds that are less than 5 acres in size with an average depth of less than 4 feet. Application rates necessary to obtain these active ingredient concentrations in treated water are shown in the following table. For additional application rate calculations, refer to the section of this label entitled Application Rate Calculation - Ponds, Lakes and Reservoirs. Split or multiple applications are recommended where dilution of treated water

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is anticipated; however, the sum of all applications must not exceed a total of 90 ppb per annual growth cycle. When average water depth of the treatment site is greater than 5 feet, apply 1 to 1.5 quarts of Fluridone SC per treated surface acre.

Average Water Depth of Treatment Site (feet)	Quarts of Fluridone SC per Treated Surface Acre
†	<del>0.16 - 0.25</del>
<del>2</del>	<del>0.33 - 0.50</del>
<del>3</del>	<del>0.50 - 0.75</del>
4	<del>0.65 - 1.00</del>
5	<del>0.80 - 1.25</del>

Average Water Depth of Treatment Site	Quarts of Fluridone SC per Treated Surface Acre		Fluid Ounces of Fluridone SC per Treated Surface Acre	
(feet)	45 ppb	to 90 ppb	45 ppb to	90 ppb
1	0.12	0.24	3.8	7.7
2	0.24	0.49	7.7	15.7
3	0.37	0.73	11.8	23.4
4	0.49	0.98	15.7	31.4
5	0.61	1.22	19.5	39.0
6	0.73	1.46	23.4	46.7
7	0.85	1.70	27.2	54.4
8	0.98	1.95	31.4	62.4
9	1.10	2.19	35.2	70.1
10	1.22	2.44	39.0	78.1

Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control species.

#### **Application to Lakes and Reservoirs**

The following treatments are recommended for treating both whole lakes or reservoirs and partial areas of lakes or reservoirs (bays, etc.). For best results in treating partial lakes and reservoirs, Fluridone SC treatment areas should be a minimum of 5 acres in size. Treatment of areas smaller than 5 acres or treatment of narrow strips, such as boat lanes or shorelines, may not produce satisfactory results due to dilution by untreated water. In lakes and reservoirs, do not apply Fluridone SC within one-fourth mile (1320 feet) of any functioning potable water intake. Rate ranges are provided as a guide to include a wide range of environmental factors, such as target species, plant susceptibility, selectivity and other aquatic plant management objectives. Application rates and methods should be selected to meet the specific lake/reservoir aquatic plant management goals.

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#### Whole Lake or Reservoir Treatments (Limited or No Water Discharge)

Single Application to Whole Lakes or Reservoirs: Where single applications to whole lakes or reservoirs are desired, apply Fluridone SC at an application rate of 10 to 90 ppb. Application rates necessary to obtain these concentrations in treated water are shown in the following table. For additional application rate calculations, refer to the section of this label entitled Application Rate Calculation - Ponds, Lakes and Reservoirs. Choose an application rate to meet the aquatic plant management objective. Where greater plant selectivity is desired, such as when controlling Eurasian watermilfoil and curlyleaf pondweed, choose an application rate lower in the rate range. For other plant species, an aquatic specialist should be contacted to determine when to choose application rates lower in the rate range to meet specific plant management goals. Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control plant species. Retreatments may be required to control more difficult to control species or in the event of a heavy rainfall event where dilution of the treatment concentration has occurred. In these cases, a second application or more may be required; however, the sum of all applications cannot exceed 150 ppb per annual growth cycle. Refer to the following section, Split or Multiple Applications to Whole Lakes or Reservoirs, for guidelines and maximum rate allowed.

Rates may be selected to provide 0.075 to 0.15 ppm of active ingredient in the treated water. Application rates necessary to obtain these active ingredient concentrations in treated water are shown in the following table. When average water depth of the treatment site is greater than 10 feet, apply 3 to 4 quarts of Fluridone SC per treated surface acre.

Average Water Depth of Treatment Site (feet)	Quarts of Fluridone SC per Treated Surface Acre
†	<del>0.2 - 0.4</del>
2	<del>0.4 - 0.8</del>
3	<del>0.6 - 1.2</del>
4	<del>0.8 - 1.6</del>
5	<del>1.0 - 2.0</del>
6	<del>1.2 - 2.4</del>
7	<del>1.4 - 2.8</del>
8	<del>1.6 - 3.2</del>
9	<del>1.8 - 3.6</del>
10	<del>2.0 - 4.0</del>

Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control species.

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Average Water Depth of Treatment Site (feet)	Quarts of Fluridone SC per Treated Surface Acre 10 ppb to 90 ppb	Fluid Ounces of Fluridone SC per Treated Surface Acre 10 ppb to 90 ppb
1:	0.03 0.24	1.0 7.7
2	0.05 0.49	1.6 15.7
2 3	0.08 0.73	2.6 23.4
	0.11 0.98	3.2 31.4
4 5	0.14 1.22	4.5 39.0
6	0.16 1.46	5.1 46.7
7	0.19 1.70	6.1 54.4
8	0.22 1.95	7.0 62.4
8 9 10	0.24 2.19	7.6 70.1
10	0.27 2.44	8.6 78.1
11	0.30 2.68	9.6 86.0
12	0.32 2.93	10.2 93.8
13	0.35 3.17	11.2 101.4
14	0.38 3.42	12.1 109.4
15	0.41 3.66	13.1 117.1
16	0.43 3.90	13.8 124.8
17.	0.46 4.15	14.7 132.2
18	0.49 4.39	15.7 140.5
19	0.51 4.63	16.3 148.2
20	0.54 4.88	17.3 156.2

## Use Rates for Control of Eurasian Watermilfoil, Curlyleaf Pondweed and Hydrilla in Whole Lake or Reservoir Treatments

The following application rates may be used for control of Eurasian watermilfoil (*Myriophyllum spicatum*), curlyleaf pondweed (*Potamogeton crispus*) and hydrilla (*Hydrilla verticillata*) when treating lakes or reservoirs where little dilution with untreated water is expected to occur. Under these conditions, Fluridone SC may be applied to provide a concentration of 0.01 ppm to 0.02 ppm (10 to 20 ppb) of active ingredient in treated water for Eurasian watermilfoil and curlyleaf pondweed and 0.015 ppm to 0.02 ppm (15 to 20 ppb) for the control of hydrilla. Application rates necessary to achieve these active ingredient concentrations in treated water are shown in the following table. For optimum control, it is recommended that applications be made early in the growing season.

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Average Water  Depth of  Treatment  Site (feet)	<del>Eurasian V</del>	Fluid ounces of F Vatermilfoil Pondweed Fl. Ounces	•	reated Surface Acre rilla Fl. Ounces
1	0.027-0.05	0.87 - 1.6	0.04 - 0.05	<del>- 1.28 - 1.6</del>
2	0.05 - 0.11	1.6 - 3.5	0.08 - 0.11	<del>2.56 - 3.5</del>
3	0.08 - 0.16	<del>2.56 - 5.12</del>	0.12 - 0.16	<del>3.84 - 5.12</del>
4	0.11 - 0.22	<del>3.5 - 7.4</del>	<del>0.16 - 0.22</del>	<del>-5.12 - 7.4</del>
5	0.14 - 0.27	<del>4.48 - 8.64</del>	<del>0.20 - 0.27</del>	<del>- 6.4 - 8.64</del>
6	0.16 - 0.32	<del>5.12 - 10.24</del>	0.24 - 0.32	<del>7.68 - 10.24</del>
7	0.19 - 0.38	6.08 - 12.16	0.28 - 0.38	<del>8.96 - 12.16</del>
8	0.22 - 0.43	<del>7.04 - 13.76</del>	0.32 - 0.43	<del>- 10.24 - 13.76</del>
9	0.24 - 0.49	<del>7.68 - 15.68</del>	<del>0.37 - 0.49</del>	<del>-11.84 - 15.68</del>
<del>10</del>	0.27 - 0.54	<del>8.64 - 17.28</del>	0.41 - 0.54	<del>13.12 - 17.28</del>

When treated with these use rates, other less susceptible species listed under Aquatic Plants Controlled may exhibit only temporary injury or stunting followed by recovery and normal growth. These 0.01 to 0.02 ppm rates may be applied where functioning potable water intakes are present.

NOTE: When applications for management of Eurasian watermilfoil are made to only portions of lakes or reservoirs, such as bays or fingers of these water bodies, the higher rates and use directions listed on this label for Application to Lakes and Reservoirs are recommended.

Split or Multiple Applications to Whole Lakes or Reservoirs: To meet certain plant management objectives, split or multiple applications may be desired in making whole lake treatments. Split or multiple application programs are desirable when the objective is to use the minimum effective dose and, through the use of a water analysis, e.g. AvasTest, add additional Fluridone SC to maintain this lower dose for sufficient time to ensure efficacy and enhance selectivity. Water may be treated with an initial application of 6 to 50 ppb. Additional split applications should be made to maintain a sufficient concentration for a minimum of 45 days. In controlling Eurasian watermilfoil and curlyleaf pondweed and where greater plant selectivity is desired, choose an application rate lower in the rate range. For other plant species, an aquatic specialist should be contacted to determine when to choose application rates lower in the rate range to meet specific plant management goals. When utilizing split or multiple applications of Fluridone SC, the utilization of AvasTest is strongly recommended to determine the actual concentration in the water over time. For split or multiple applications, the sum of all applications must not exceed 150 ppb per annual growth cycle.

**NOTE:** In treating lakes or reservoirs that contain functional potable water intakes and the application requires treating within ½ mile of a potable water intake, no single application can exceed 20 ppb. Additionally, the sum of all applications cannot exceed 150 ppb per annual

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growth cycle.

#### Partial Lake or Reservoir Treatments

Where dilution of Fluridone SC with untreated water is anticipated, such as in partial lake or reservoir treatments, split or multiple applications may be used to extend the contact time with the target plants. The application rate and use frequency of Fluridone SC in a partial lake is highly dependent upon the treatment area. Higher application rates may be required and frequency of applications will vary depending upon the potential for untreated water to dilute the Fluridone SC concentration in the treatment area. Use higher rates where greater dilution with untreated water is anticipated.

Treatment Areas Greater than ¼ Mile from a Functioning Potable Water Intake: For single applications, apply Fluridone SC at application rates from 30 to 150 ppb. Split or multiple applications may be made, however, the sum of all applications cannot exceed 150 ppb per annual growth cycle. Split applications should be made to maintain a sufficient concentration in the target area for a period of 45 days or longer. The use of AvasTest is recommended to maintain the desired concentration in the target area over time.

Treatment Areas Within ¼ Mile of a Functioning Potable Water Intake: In treatment areas that are within ¼ mile of a potable water intake, no single application can exceed 20 ppb. When utilizing split or multiple applications of Fluridone SC for sites that contain a potable water intake, AvasTest is required to determine the actual concentration in the water. Additionally, the sum of all applications cannot exceed 150 ppb per annual growth cycle.

#### Application Rate Calculation - Ponds, Lakes and Reservoirs

The amount of Fluridone SC to be applied to provide the desired ppb concentration of active ingredient in treated water may be calculated as follows:

Quarts of Fluridone SC required = Average water depth x Desired ppb concentration x 0.0027 per treated surface acre of treatment site (feet) of active ingredient

For example, the quarts per acre of Fluridone SC required to provide a concentration of 25 ppb of active ingredient in water with an average depth of 5 feet is calculated as follows:

5 x 25 x 0.0027 = 0.33 quarts per treated surface acre

When measuring quantities of Fluridone SC, quarts may be converted to fluid ounces by multiplying quarts to be measured by 32. For example, 0.33 quarts x 32 = 10.5 fluid ounces.

**NOTE:** Calculated rates should not exceed the maximum allowable rate in quarts per treated surface acre for the water depth listed in the application rate table for the site to be treated.

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#### **Application to Drainage Canals and Irrigation Canals**

In drainage and irrigation canals, Fluridone SC should be applied at the rate of 2 quarts per treated surface acre. Where water retention is possible, the performance of Fluridone SC will be enhanced by restricting water flow. In moving bodies of water, use an application pattern that will provide a uniform distribution and avoid concentration of the herbicide.

Static Canals: In static drainage and irrigation canals, Fluridone SC should be applied at the rate of 1 to 2 quarts per treated surface acre.

Moving Water Canals: The performance of Fluridone SC will be enhanced by restricting or reducing water flow. In slow moving bodies of water, use an application technique that maintains a concentration of 15 to 40 ppb in the target area for a minimum of 45 days. Fluridone SC can be applied by split or multiple broadcast applications or by metering in the product to provide a uniform concentration of the herbicide based upon the flow pattern. The use of AvasTest is recommended to maintain the desired concentration in the target area over time.

Static or Moving Water Canals Containing a Functioning Potable Water Intake: In treating a static or moving water canal that contains a functioning potable water intake, DO NOT apply Fluridone SC at application rates greater than 20 ppb within ¼ mile (1320 feet) of any functioning potable water intake. Applications of less than 20 ppb may be applied within ¼ mile from a functioning potable water intake; however, if applications of Fluridone SC are made within ¼ mile from a functioning potable water intake, the AvasTest must be utilized to demonstrate that concentrations do not exceed 150 ppb at the potable water intake.

Application Rate Calculation – Moving Water Drainage Canals and Irrigation Canals
The amount of Fluridone SC to be applied through a metering system to provide the desired ppb
concentration of active ingredient in treated water may be calculated as follows:

- 1. Average flow rate x Average canal x Average water x 0.9 = Cubic feet per second (feet per second) width (feet) depth (feet) (CFS)
- 2. CFS x 1.98 = acre-feet per day (water movement)
- 3. Acre-feet per day  $\mathbf{x}$  desired ppb  $\mathbf{x}$  0.0027 = Quarts of Fluridone SC required per day

Griffin L.L.C.

EPA Reg. No. 1812-435

File Name: g435d03a

05/03

Page 15 of 16

#### WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling or application of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid for this product or at GRIFFIN'S election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

AvasTest is a trademark of Griffin L.L.C. Griffin and Design are a registered trademark of Griffin Corporation.

[Based on EPA stamped accepted label dated March 15, 2000]

Griffin L.L.C.

EPA Reg. No. 1812-435

File Name: g435d03a

05/03

Page 16 of 16



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

June 11, 2003

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

CAROL PATTERSON GRIFFIN L.L.C. PO Box 1847 VALDOSTA, GA 31603-1847

PRODUCT NAME: FLURIDONE SC COMPANY NAME: GRIFFIN L.L.C.

**OPP IDENTIFICATION NUMBER: 300167** 

EPA FILE SYMBOL: 1812-435 EPA RECEIPT DATE: 06/11/03

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Registration Division, Risk Management Team 23, at (703) 305-6224.

Sincerely,

Front End Processing Staff
Information Services Branch

Information Resources and Services Division





#### VIA UPS NEXT DAY AIR

May 27, 2003

Ms. Joanne I. Miller Document Processing Desk (AMEND) Office of Pesticide Programs (7504C) U.S. Environmental Protection Agency Room 266A, Crystal Mall 2 1921 Jefferson Davis Highway Arlington, Virginia 22202-4501

Dear Ms. Miller:

**SUBJECT:** FLURIDONE SC (EPA REG. NO. 1812-435) LABEL AMENDMENT

Enclosed are five copies of proposed amended labeling for Fluridone SC (EPA Reg. No. 1812-435). The proposed changes incorporate changes in First Aid statements required by PR Notice 2001-1, as well as other changes to make our label comparable to the most recent stamped accepted label (copy enclosed) of SePRO Corporation's substantially similar product, Sonar A.S. (EPA Reg. No. 67690-4). Proposed deletions are indicated by strikeout, text that has been moved is shown in outline, and proposed additional text is highlighted.

Should you require any additional information, please contact me at 229-293-4242, Extension 1104.

Sincerely,

GRIFFIN L.L.C.

W. A. Hawkins, Jr., Ph.D.

Senior Registration Manager

Form Approved. OMB No. 2070-0060, Approval expires 2-28-95 e read instructions on reverse before completing form **OPP Identifier Number** Registration United States **Environmental Protection Agency** Amendment 300167 Washington, DC 20460 Other Application for Pesticide - Section I 1. Company/Product Number 2. EPA Product Manager 3. Proposed Classification 1812 - 435 Joanne I. Miller Restricted None PM# 4. Company/Product (Name) Fluridone SC 23 5. Name and Address of Applicant (Include ZIP Code) 6. Expedited Reveiw. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling Griffin L.L.C. P. O. Box 1847 EPA Reg. No. Valdosta, GA 31603-1847 Check if this is a new address **Product Name** Section - II Amendment - Explain below. Final printed labels in repsonse to Agency letter dated Resubmission in response to Agency letter dated "Me Too" Application. Notification - Explain below. Other - Explain below. Explanation: Use additional page(s) if necessary. (For section I and Section II.) Label amendment to add changes in First Aid statements as required by PR Notice 2001-1, and to update and reformat the directions for use Section - III 1. Material This Product Will Be Packaged In: Child-Resistant Packaging Unit Packaging Water Soluble Packaging 2. Type of Container Metal Yes Yes Yes Plastic No No Glass Paper If "Yes" No. per If "Yes" No. per \* Certification must Unit Packaging wgt. container Package wgt container Other (Specify) e submitted Location of Net Contents Information 4. Size(s) Retail Container 5. Location of Label Directions Container Lahel 6. Manner in Which Label is Affixed to Product Lithograph Paper glued Stenciled Section - IV 1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.) Title Name Telephone No. (Include Area Code) 229-293-4242 Ext. 1104 W. A. Hawkins, Jr., Ph.D. Senior Registration Manager 6. Date Application Certification Received I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowlingly false or misleading statement may be punishable by fine or imprisonment of (Stamped) both under applicable law. 2. Signature Senior Registration Manager

5. Date

May 27, 2003

W. A. Hawkins, Jr., Ph.D.

4. Typed Name



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OFFICE OF
PREVENTION, PESTICIDES
AND TOXIC SUBSTANCES

1, Joanne 1. Miller, Product Manager of Team Number 23, Herbicide Branch, Registration Division, Office of Pesticide Programs, Office of Prevention, Pesticides and Toxic Substances, United States Environmental ProtectionAgency ("EPA"), certify that the pesticide product (s) listed below is, as of the date of this letter, a registered product under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, and that as such, the product(s) may be sold and marketed in the United States of America as authorized and limited by FIFRA. A true and correct copy of the productlabel approved by EPA is attached to accompany this letter.

Registration of this product(s) with EPA also denotes that the registrant listed below is responsible for ensuring full compliance with all the laws of the United States of America, or governing jurisdiction, regarding the sale, storage and/or disposal of the product(s). Further, the recipient of this letter is on notice that the referenced registration and/or the accompanying label may change subsequent to the date of this letter. EPA assumes no responsibility to notify the recipient of this letter of any change in the status of the registration(s) and/or the product label for the product(s) listed below.

EPA has issued registration number(s) for the product(s) listed below to:

Griffin L.LLC. 2509 Rocky Ford Road Valdosta, GA 31601

Name of Product

Alternate Brand Name

EPA Reg No

FLURIDONE SC

Avast

1812-435



Joanne I. Miller

Product Manager (23)

Herbicide Branch

Registration Division (7505C)

oanne J. Miller

JUN 28 2000

Mr. W. A. Hawkins, Jr. Ph.D. Registration Manager GRIFFIN L.L.C. P.O. Box 1847 Valdosta, GA 31603-1847

Dear Dr. Hawkins:

The Agency has reviewed your application for an alternate confidential statement of formula (CSF) for **EPA Registration 1812-435**. The alternate CSF dated <u>5-8-00</u> is acceptable. A copy of the CSF will be added to the file for the subject product.

Sincerely,

Sherada D. Hobgood

15/

Minor Formulation Review Coordinator

Registration Division (7505C)

Environmental Protection Agency Washington, DC 20460				X	Registra Amenda Other		OPP Identifier Number 253907	
		Applicatio	n for Pestic	ide - Sect	tion			PARTY AND
1. Company/Product Number				Product Mana		11	3. Pr	oposed Classification
4. Company/Product (Name)			PM#	Joanne I. Miller X None			None Restricted	
4. Company/ rodder (warne	Fluridon	e SC		23				AND THE SHE
P.O. Vald	fin L.L.C. Box 1847 osta, GA 31 s is a new address		(b)(i), to: EPA	A CONTRACT OF THE PARTY OF THE				FIFRA Section 3(c)(3) mposition and labeling
			Section -	_				
Notification - Explain  Explanation: Use addition  Minor formula	nal page(s) if necess						t ingı	redients.
		eth en eg tarke h	Section -	III				
1. Material This Product Wi	Il Be Packaged In:		14.		640			
Child-Resistant Packaging Yes* No Certification must	Unit Packaging Yes No If "Yes" Unit Packaging wg	No. per	Water Soluble Yes No If "Yes" Package wgt	Packaging  No. per container		2. Type of	Container  Metal Plastic Glass Paper Other (S	pecify)
be submitted 3. Location of Net Contents	Information	4. Size(s) Reta	ail Container		5. Lo	cation of Lab	The second secon	ins and the second
Label	Container	100	Sales and	70 mm				panying product
6. Manner in Which Label is	Affixed to Product	Lithogr Paper of Stencil	aph glued ed	Other				100
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1. Contact Point   Complete	items directly below			be contacted,	if nec	essary, to pr		
W. A. Haw	kins, Jr.,		Regis	tration	Man	ager	912-2	No. (Include Area Code) 293-4242 x.110
I cortify that the state I acknowledge that as both under applicable	ny knowingly false or		all attachments t					6. Date Application Received (Stamped)
2. Signature 21. a.	Hawkins.	1. 3	Regis	tration	Man	ager		

W. A. Hawkins, Jr., Ph.D.

4. Typed Name

May 9, 2000

5. Date

#### PAPERWORK REDUCTION ACT NOTICE and INSTRUCTIONS

PAPERWORK REDUCTION ACT NOTICE: Public reporting burden for this collection of information is estimated to average 0.85 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, (2136), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.

INSTRUCTIONS: This form is to be used for all applications for new registration, end use reregistration, amendment, resubmission, to applications for notifications, final printed labeling, reregistration, etc. In order to process an application for a new registration submitted on this form, the following material must accompany the application:

- 1. Certification with Respect to Citation of Data (EPA Form 8570-29). [If not exempted by 40 CFR 152.81 (b) (4)];
- 2. Confidential Statement of Formula (EPA Form 8570-4);
- 3. Formulator's Exemption Statement (EPA Form 8570-27);
- 4. Five copies of draft labeling;
- 5. Three copies of any data submitted:
- 6. Authorization letter where applicable;
- 7. Matrices where applicable.

Submission of Labeling - Labeling should first be submitted in the form of draft labels with all applications for new registration. Such draft labels may be in the form of typed label text on 8.5 x 11 inch paper for submission or a mockup of the proposed label. If prepared for mockup, it should be constructed in a way as to facilitate storage in an 8.5 x 11 inch file. Mockup labels significantly smaller than 8.5 x 11 inches should be mounted on 8.5 x 11 inch paper for submission.

Submission of Data - Data submitted in support of this application must be submitted in accordance with PR Notice 86-5.

SPECIFIC INSTRUCTIONS: Please read the instructions listed below before completing this application. First determine the type of registration action, listed in Block A, for which you are submitting this application. For applications submitted in connection with New Registration actions, Sections I, III, and IV must be completed by the applicant. For applications submitted in connection with amended reregistration actions, resubmissions, notifications, reregistrations, etc., Sections I, II, and IV must be completed by the applicant.

Block A - Check the appropriate action for which you are submitting this form.

SECTION I - This section must be completed, as applicable, for all registration actions.

- Company/Product Number Insert your Company Number, if one has been assigned by EPA. This number may have been assigned to you as a
  basic registrant, a distributor, or as an establishment. If your product is registered, insert the Product Number.
- 2. EPA Product Manager If known, fill in the name and PM number of the EPA Product Manager.
- 3. Proposed Classification Specify the proposed classification of this product.
- 4. Product Name Enter the complete product name of this pesticide as it will appear on the label. The name must be specific to this product only. Duplication of names is not permitted among products of the same company. Do not include any brand name or company line designations.
- 5. Name and Address of Applicant The name of the firm or person and address shown in your application is the person or firm to whom the registration will be issued. If you are acting in behalf of another party, you must submit authorization from that party to act for them in registration matters. An applicant not residing in the United States must have an authorized agent residing in the United States to act for them in all registration matters. The name and complete mailing address of such an agent must accompany this application.
- 6. Expedited Review FIFRA section 3 (c) 3 (B) provides for expedited review of applications for registration, or amendments to existing registration that are similar or identical to other pesticide products that are currently registered with the EPA. In order for your application to be eligible for expedited review, you must provide us with the EPA Registration Number and product name of the product you believe is similar to or identical to your product. The product must be similar or identical in both formulation and labeled uses.

SECTION II - This section must be completed for all applications submitted to amend the registration only of a currently registered product (Amendment), for a resubmission in response to an Agency letter, for notifications to the Agency, for the submission of final printed labeling, for reregistration and for any other action that pertains to a specific EPA-registered product. This section is not to be used for a new application for registration.

1. Subject of submission - Check the applicable block and provide the Agency letter date if appropriate. Provide a brief explanation of the purpose(s) for the submission, such as "the addition of a site, pest or crop (specify)"; "amend the Confidential Statement of Formula by..."; "reregistration submission"; "general label revision of use directions." Attach a separate page if additional space is needed.

SECTION III (Packaging and Container Information) - This Section must be completed for all applications submitted in connection with new registration or applicable amendments.

- 1. Type of Packaging Check the appropriate block if your product will be packaged in the indicated packaging types.
- 2. Type of Retail Container Indicate type of container in which product will be marketed.
- 3. Legation of Net Contents Indicate the location of the net contents information for your product.
- 4. Size(s) of Retail Container Specify the net contents of all retail containers for your product.
- 5. League of Use Directions Indicate the location of the use directions for your product.
- 6. Manner in which label is affixed to product Indicated the method product label is attached to retail container.

SECTION IV (Contact Point) - This Section must be completed for all applications for Registration actions, i.e., new products registration, resubmission, "me-teq.; seregistration, etc.

- 1-5. Self-explanatory. •••
- 6. EPA Use Only.



#### VIA CERTIFIED MAIL

May 9, 2000

Ms. Sherada D. Hobgood Registration Support Branch Document Processing Desk (AMEND) Office of Pesticide Programs (7504C) U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington, D.C. 20460-0001

Dear Ms. Hobgood:

SUBJECT: MINOR FORMULATION AMENDMENT PER PR NOTICE 98-10 ADD INERT INGREDIENTS FLURIDONE SC (EPA REG. NO. 1812-435)

The proposed alternative formulation includes additional inert ingredients and an adjustment in the certified limits for the primary and Griffin believes that this minor amendment qualifies for accelerated review per PR Notice 98-10.

The following items are enclosed:

- 1. EPA Form 8570-1;
- 2. One copy of the approved CSF for the basic formulation dated November 30,1999; and
- 3. Two copies of the CSF for the proposed alternative formulation dated May 8, 2000.

Should you require any additional information, please contact me at 912-293-4242, Extension 1104.

Sincerely,

GRIFFIN L.L.C.

W. A. Hawkins, Jr., Ph.D.

Registration Manager

Please read Instructions on re	verse before comp	leting forn	n	Fo	rm Approved	d. OM	B No. 20	70-0060. A	pproval expires 05/	
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		Applic	ation fo		e - Section					
1. Company/ Product Number	er 1812-435				Product Mai oanne I. Mille			3. Propo	osed Classification	
4. Company/ Product (Name	) Fluridone SC	;		PM# 2	3			X Non	e Restricted	
5. Name and Address of App Griffin L.L.C. P.O. Box 1847 Valdosta, Georgia		Code)		(b)(i), r to:					RA Section 3(c)(3) aposition and labelin	ıg
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Amendment - Explain	n holow				Final printed	d Jabo	le in reen		OTIFICATION	
Resubmission in resp		ter dated			Agency lette				MAR 3 0 2000	
Notification - Explain		tor datas			"Me Too" A				0 0 2000	
Explanation: Use addition					Other - expl	ain be	low.			
This notification is consisten made to the labeling or the owillfully make any false state 40 CFR 152.46, this product of FIFRA.	confidential stateme ement to EPA. I fu	ent of forn rther unde	nula of this erstand tha	s product. I It if this noti	understand t fication is no	that it	is a viola sistent wi	tion of 18 lith the term	U.S.C. Sec. 1001 to s of PR Notice 98-1	o 10 an
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1. Material This Product Will	Be Packaged In:									
Child-Resistant Packaging	Jnit Packaging				ole Packaging	9		2. Type of		
Yes*	⊢ Yes			Yes No	•				Metal Plastic	
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3. Location of Net Contents	•	4. Size(s	) of Retail	Container			_	n of Label ( On Label	Directions	
Label	Container							On Labeling	accompanying pro	duct
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1			S	ection IV				•		
1. Contact Point (Complete i	items directly belov	v for ident	ification o	f individual t	o be contact	ted, if	necessar	y, to proces	ss this application.)	
Name W. A. Hawkins,	, Jr.	!		Registration Copper Pr	on Manage oducts	∍r,		•	No. (Include Area Co 3-4242 Ext. 11	
I certify that the statemen complete. I acknowledge imprisonment or both unde	that any knowingly		and all atta					•• <b>••</b> ••	ate Application Received (Stamped)	
	wkins. fr.			Registration	on Manage	er			•••••	
4. Typed Name			5. Date							
W. A. Hawkins, Jr. Mar				March 16	, 2000					





<u>AC</u> TIVE INGREDIENT	
ıridone: 1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1 <i>H</i> )-pyridinone	41.7%
INERT INGREDIENTS	58.3%
TOTAL	

Contains 4 Pounds of Fluridone Per Gallon

A Herbicide for Management of Aquatic Vegetation in Fresh Water Ponds, Lakes, Reservoirs, Drainage Canals and Irrigation Canals

# KEEP OUT OF REACH OF CHILDREN CAUTION STATEMENT OF PRACTICAL TREATMENT IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists. IF SWALLOWED: Call a physician or Poison Control Center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting. IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists. For medical emergencies involving this product, call toll free 1-888-324-7598. See Label for Additional Precautions and Directions for Use

GRIFFIN L.L.C.

VALDOSTA, GEORGIA 31601

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

Harmful if swallowed, absorbed through skin or inhaled. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### **ENVIRONMENTAL HAZARDS**

Follow use directions carefully so as to minimize adverse effects on nontarget organisms. In order to avoid impact on threatened or endangered aquatic plant or animal species, users must consult their State Fish and Game Agency or the U.S. Fish and Wildlife Service before making applications.

Do not contaminate water when disposing of equipment washwaters. Trees and shrubs growing in water treated with Avast! may occasionally develop chlorosis. Do not apply in tidewater/brackish water.

Lowest rates should be used in shallow areas where the water depth is considerably less than the average depth of the entire treatment site, for example, shallow shoreline areas.

#### **DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying. Shake well before using.

#### STORAGE AND DISPOSAL

not contaminate water, food or feed by storage or disposal.

RAGE: Store in original container only. Do not store near feed or foodstuffs. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

PESTICIDE DISPOSAL: Wastes resulting from use of this product may be used according to label directions or disposed of at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

#### **GENERAL INSTRUCTIONS**

Avast! is a selective systemic aquatic herbicide for management of aquatic vegetation in fresh water ponds, lakes, reservoirs, drainage canals and irrigation canals. Avast! is absorbed from water by plant shoots and from hydrosoil by the roots of aquatic vascular plants. It is important to maintain the recommended concentration of Avast! in contact with the weeds as long as possible. Rapid water movement or any condition which results in rapid dilution of Avast! in treated water will reduce its effectiveness.

In susceptible plants, Avast! inhibits the formation of carotene. In the absence of carotene, chlorophyll is rapidly degraded by sunlight. Herbicidal symptoms of Avast! appear in 7 to 10 days and appear as white (chlorotic) or pink growing points. Under optimum growing conditions, 30 to 90 days are required before the desired level of aquatic weed management is achieved with Avast!. Species susceptibility to Avast! may vary, depending on time of year, stage of growth, and water movement. For best results, apply Avast! prior to initiation of weed growth or when weeds begin active growth.

Avast! is not corrosive to application equipment.



#### SPECIAL PRECAUTIONS

- Do not apply this product through any type of irrigation system.
- Obtain required permits. Permits may be required by state or local agencies. Consult with appropriate state or local water authorities before applying this product.
- In lakes and reservoirs, do not apply Avast! within one-fourth mile (1320 feet) of any functioning potable water intake.
   NOTE: Existing potable water intakes which are no longer in use, such as those that have been replaced by potable water wells or connections to a municipal water system, are not considered to be functioning potable water intakes.
- Irrigation with water treated with Avast! may result in injury to the irrigated vegetation. Those who irrigate from areas treated with Avast! should be informed of the irrigation time frames presented in the table below. These time frames are suggestions which should be followed to reduce the potential for injury to vegetation irrigated with water treated with Avast!.

Recommended Waiting Periods Before Irrigating with Water Treated with Avast! (Days After Application) Newly Seeded Grops/Seedbeds Established or Areas to be Planted. Established Row Crops/ Including Overseeded. Tree Crops Turf/Plants Golf Course Greens **Application Site** Ponds and Static Canals' 7 30 30 Canals 7 14 30 Lakes and Reservoirs<sup>2</sup> 14 14

<sup>1</sup> For purposes of Avast! labeling, a pond is defined as a body of water 10 acres or less in size. A lake or reservoir is greater than 10 acres.

<sup>&</sup>lt;sup>2</sup> In lakes and reservoirs where one-half or greater of the body of water is treated, use the pond and static canal irrigation restrictions.

#### WEED CONTROL INFORMATION

Vascular Aquatic Plants Controlled by Avast!

Floating Plants:

Duckweed, Common (Lemna minor)1

' Controlled only with a surface application of Avast!

**Emersed Plants:** 

Spatterdock (Nuphar luteum)

Waterlily (Nymphaea spp.)

Submersed Plants:

Bladderwort (Utricularia spp.)

Coontail, Common (Ceratophyllum demersum)

Elodea, Common (Elodea canadensis)

Egeria, Brazilian Elodea (Egeria densa)

Fanwort, Cabomba (Cabomba caroliniana)

Hydrilla (Hydrilla verticillata)

Naiad (Najas spp.)

Pondweed (Potamogeton spp.), except Illinois pondweed

Watermilfoil (Myriophyllum spp.)

Shoreline Grasses:

Paragrass (Brachiaria mutica)

#### Vascular Aquatic Plants Partially Controlled by Avast!

atorweed (Alternanthera philoxeroides)

anarygrass, Reed (Philaris arundinaceae)

Cattail (Typha spp.)

Cutgrass, Giant (Zizaniopsis miliacea)

Lotus, American (Nelumbo lutea)

Pondweed, Illinois (Potamogeton illinoensis)

Parrotfeather (Myriophyllum brasiliense)

Smartweed (Palygonum spp.)

Spikerush (Eleocharis spp.)

Torpedograss (Panicum repens)

Watergrass, Southern (Hydrochloa caroliniensis)

Watermeal, Common (Wolffia columbiana)2

Waterprimrose, Creeping (Ludwigia peploides)

Waterpurslane (Ludwigia palustris)

Watershield (Brasenia schreberi)

<sup>2</sup>Partial control only with a surface application of Avast! at the maximum labeled rate.

#### Vascular Aquatic Plants Not Controlled by Avast!

e (Chara and Nitella)

Anowhead (Sagittaria spp.)

Bacopa (Bacopa spp.)

Big Floatingheart; Banana Lily (Nymphoides aquatica)

Bulrush (Scirpus spp.)

Frogbit, American (Limnobium spongia)

Maidencane (Panicum hemitomon)

Pickerelweed; Lanceleaf (Pontederia cordata)

Rush (Juncus spp.)

Tapegrass; American Eelgrass (Vallisneria americana)

Waterhyacinth, Floating (Eichornia crassipes)

Water Lettuce (Pistia stratiotes)

Water Pennywort (Hydrocotyle umbellata)

#### MIXING AND APPLICATION DIRECTIONS

The aquatic plants present in the treatment site should be identified prior to application to determine their susceptibility to Avast!. It is also important to determine the area (acres) to be treated and the average depth in order to select the proper application rate. Do not exceed the maximum labeled rate for a given treatment site per annual growth cycle.

Shake Avast! well before using. Add the recommended amount of Avast! to water in the spray tank during the filling operation. Agitate while filling and during spraying. Surface or subsurface application of the spray can be made with conventional spray equipment. Avast! can also be applied near the surface of the hydrosoil using weighted trailing hoses. A spray volume of 5 to 100 gallons per acre may be used. Avast! may also be diluted with water and the concentrated mix metered into the pumping system.

#### Application to Ponds

Avast! may be applied to the entire surface area of a pond. Rates may be selected to provide 0.06 to 0.09 ppm of active ingredient in the treated water. Application rates necessary to obtain these active ingredient concentrations in treated water are shown in the following table. When average water depth of the treatment site is greater than 5 feet, apply 1 to 1.5 quarts of Avast! per treated surface area.

Average Water Depth of Treatment Site (feet)	Quarts of Avast! per Treated Surface Acre
1	0.16 - 0.25
2	0.33 - 0.50
3	0.50 - 0.75
4	0.65 - 1.00
5	0.80 - 1.25

Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control species.

#### Application to Lakes and Reservoirs

For best results in lakes and reservoirs, Avast! treatment areas should be a minimum of 5 acres in size. Treatment of areas smaller than 5 acres or treatment of narrow strips, such as boat lanes or shorelines, may not produce satisfactory results due to dilution by untreated water. In lakes and reservoirs, do not apply Avast! within one-fourth mile (1320 feet) of any functioning potable water intake.

Rates may be selected to provide 0.075 to 0.15 ppm of active ingredient in the treated water. Application rates necessary to obtain these active ingredient concentrations in treated water are shown in the following table. When average water depth of the treatment site is greater than 10 feet, apply 3 to 4 quarts of Avast! per treated surface acre.

Quarts of Avast! per Treated Surface Acre
0.2 - 0.4
0.4 - 0.8
0.6 - 1.2
0.8 - 1.6
1.0 - 2.0
1.2 - 2.4
1.4 - 2.8
1.6 - 3.2
1.8 - 3.6
2.0 - 4.0

Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control species.

### Use Rates for Control of Eurasian Watermilfoil, Curlyleaf Pondweed and Hydrilla in Whole Lake or Reservoir Treatments

The following application rates may be used for control of Eurasian watermilfoil (Myriophyllum spicatum), curlyleaf pondweed (Potamogeton crispus) and hydrilla (Hydrilla verticillata) when treating lakes or reservoirs where little dilution with untreated water is expected to occur. Under these conditions, Avast! may be applied to provide a concentration of 0.01 ppm to 0.02 ppm (10 to 20 ppb) of active ingredient in treated water for Eurasian watermilfoil and curlyleaf pondweed and 0.015 ppm to 0.02 ppm (15 to 20 ppb) for the control of hydrilla. Application rates necessary to achieve these active ingredient concentrations in treated water are shown in the following table. For optimum control, it is recommended that applications be made early in the growing season.

Quarts or Fluid Ounces of Avast Per Treated Surface Acre ••

Average Water Depth of Treatment	Curlyleaf			<u>irilia</u>
Site (feet)	Quarts	Fl. Ounces	Quarts	Fl. Ounces
1	0.027- 0.05	0.87 - 1.6	0.04 - 0.05	28 - 1.6
2	0.05 - 0.11	1.6 - 3.5	<b>9.08 - 0.1</b>	2.56 - 3.5
3	0.08 - 0.16	2.56 - 5.12	• 0.12 - 0.16	3.84 - 5.12
4	0.11 - 0.22	3.5 - 7.4	0.16 - 0.22	5-12 - 7.4
5	0.14 - 0.27	4.48 - 8.64	0.20 - 0.27	6.4 - 8.64
6	0.16 - 0.32	5.12 - 10.24	0.24 - 0.32	7-68 - 10.24
7	0.19 - 0.38	6.08 - 12.16	0.28 - 0.38	8.96 - 12.16
8_	0.22 - 0.43	7.04 - 13.76	0.32 - 0.43	10.24 - 13.76
9	0.24 - 0.49	7.68 - 15.68	0.37 - 0.49	11.84 - 15.68
10	0.27 - 0.54	8.64 - 17.28	0.41 - 0.54	13.12 - 17.28

When treated with these use rates, other less susceptible species listed under Aquatic Plants Controlled may exhibit only temporary injury or stunting followed by recovery and normal growth. These 0.01 to 0.02 ppm rates may be applied where functioning potable water intakes are present.

NOTE: When applications for management of Eurasian watermilfoil are made to only portions of lakes or reservoirs, such as bays or fingers of these water bodies, the higher rates and use directions listed on this label for Application to Lakes and Reservoirs are recommended.

#### Application Rate Calculation - Ponds, Lakes and Reservoirs

The amount of Avast! to be applied to provide the desired ppm concentration of active ingredient in treated water may be calculated as follows:

Quarts of Avast! required per treated surface acre = Average water depth x of treatment site (feet)

x Desired ppm concentration x 2.7 of active ingredient

For example, the quarts per acre of Avast! required to provide a concentration of 0.075 ppm of active ingredient in water with an average depth of 5 feet is calculated as follows:

5 x 0.075 x 2.7 = 1.0 quart per treated surface acre.

n measuring quantities of Avast!, quarts may be converted to fluid es by multiplying quarts to be measured by 32. For example, 0.25 quarts  $\times$  32 = 8 fluid ounces.

**NOTE:** Calculated rates should not exceed the maximum allowable rate in quarts per treated surface acre for the water depth listed in the application rate table for the site to be treated.

#### **Application to Drainage Canals and Irrigation Canals**

In drainage and irrigation canals, Avast! should be applied at the rate of 2 quarts per treated surface acre. Where water retention is possible, the performance of Avast! will be enhanced by restricting water flow. In moving bodies of water, use an application pattern that will provide a uniform distribution and avoid concentration of the herbicide.

#### NOTICE OF WARRANTY

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling, or application of this product, whether in contract, warranty, tort, negligence, strict liability, or otherwise, shall not exceed the purchase price paid for this product or at GRIFFIN'S election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

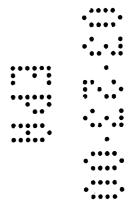
Avast! is a trademark of Griffin L.L.C.

GCN 031500 CPC 060680

Griffin and Design are a registered trademark of Griffin Corporation.

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#### VIA CERTIFIED MAIL



S. H.

March 16, 2000

Ms. Joanne I. Miller
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

Dear Ms. Miller:

**SUBJECT:** FLURIDONE SC (EPA REG. NO. 1812-435)

NOTIFICATION OF ALTERNATE BRAND NAME

AVAST!TM

This is to notify the Agency that Griffin intends to distribute its recently registered end-use product Fluridone SC (EPA Reg. No. 1812-435) under the alternate brand name Avast!<sup>TM</sup> With the exception of the alternate brand name, the product label will be identical to the EPA stamped accepted label dated March 15, 2000. We have, of course, added the EPA registration number and corrected the Statement of Practical Treatment as required by the written comments accompanying the stamped accepted label.

Should you require any additional information, please contact me at 912-293-4242, Extension 1104.

GRIFFIN L.L.C.

W. A. Hawkins, Jr., Ph.D.

Registration Manager



U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7505C) 401 "M" St., S.W. Washington, D.C. 20460

Reregistration

X Registration

1812-435

EPA Reg.

Number:

Date of Issuance:

MAR | 5 2000

Term of Issuance: NOTICE OF PESTICIDE:

Conditional

Name of Pesticide Product:

Fluridone SC

(under FIFRA, as amended)

Name and Address of Registrant (include 2IP Code):

Griffin L.L.C. P.O. Box 1847

Valdosta, GA 31603-1847

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

- Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.
- Make the following label changes before you release the product for shipment:
  - a. Revise the EPA Registration Number to read, "EPA Reg. No. 1812-435".
  - b. Add a dermal statement in the Statement of Practical Treatment to read "IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists."

Signature of Approving Official:

Date:

MAR | 5 2000

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Page 2 EPA Req. No. 1812-435

- 3. Submit an acceptable Corrosion Characteristics study (830.6320) for the technical fluridone material (i.e., the source of the active ingredient) within two (2) years of the date of this Notice. We acknowledge that data corresponding to this requirement was previously submitted with the original application. However, the study that was submitted is not sufficient to make any evaluation. Therefore, a one-year Corrosion Characteristics study for the technical fluridone material must be performed and submitted.
- 4. Submit one copy of the revised final printed label for the record before you release the product for shipment.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Joanne I. Miller Product Manager (23) Herbicide Branch Registration Division (7505C)

Enclosure

DK:305	5-7546:H	18/9M23	c	ONCURRENCES		
SYMBOL >	7505C					
surname >	D. KEWNY					
DATE >	3/15/200					

12/03/99

#### **FLURIDONE SC**

#### AQUATIC HERBICIDE

gx649s99a ACCEPTED with COMMENTS In EPA Letter Dated

MAR | 5 2000 Under the Federal Insecticide.

Active Ingredient Fluridone:	as amended, for the pesticide Act registered under EPA Reg. No. 1812-435
1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1H)-pyridinone	41.7%
Inert Ingredients	<u>58.3%</u>
Total	100.0%

Contains 4 pounds of fluridone per gallon.

A herbicide for management of aquatic vegetation in fresh water ponds, lakes, reservoirs, drainage canals and irrigation canals.

# KEEP OUT OF REACH OF CHILDREN CAUTION

#### STATEMENT OF PRACTICAL TREATMENT

IF IN EYES: Flush eyes with plenty of water. Call a physician if irritation persists.

IF SWALLOWED: Call a physician or Poison Control Center. Drink one or two glasses of water and induce vomiting by touching back of throat with finger. If person is unconscious, do not give anything by mouth and do not induce vomiting.

**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

For medical emergencies involving this product, call toll free 1-888-324-7598. See Label for Additional Precautions and Directions for Use.

Griffin L.L.	C.			EPA Reg. No. 181	2-
Valdosta, GA 31601	A 31601			EPA Est. No	•
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Griffin L.L.C.	EPA Reg. No. 1812-xxx	File Name: GX649s99a	12/99		Page loof 9

# PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin or inhaled. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

#### ENVIRONMENTAL HAZARDS

Follow use directions carefully so as to minimize adverse effects on nontarget organisms. In order to avoid impact on threatened or endangered aquatic plant or animal species, users must consult their State Fish and Game Agency or the U.S. Fish and Wildlife Service before making applications.

Do not contaminate water when disposing of equipment washwaters. Trees and shrubs growing in water treated with Fluridone SC may occasionally develop chlorosis. Do not apply in tidewater/brackish water.

Lowest rates should be used in shallow areas where the water depth is considerably less than the average depth of the entire treatment site, for example, shallow shoreline areas.

#### DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying. Shake well before using.

#### STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**STORAGE:** Store in original container only. Do not store near feed or foodstuffs. In case of leak or spill, use absorbent materials to contain liquids and dispose as waste.

**PESTICIDE DISPOSAL:** Wastes resulting from use of this product may be used according to label directions or disposed of at an approved waste disposal facility.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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#### **GENERAL INSTRUCTIONS**

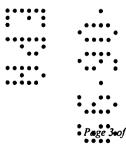
Fluridone SC is a selective systemic aquatic herbicide for management of aquatic vegetation in fresh water ponds, lakes, reservoirs, drainage canals and irrigation canals. Fluridone SC is absorbed from water by plant shoots and from hydrosoil by the roots of aquatic vascular plants. It is important to maintain the recommended concentration of Fluridone SC in contact with the weeds as long as possible. Rapid water movement or any condition which results in rapid dilution of Fluridone SC in treated water will reduce its effectiveness.

In susceptible plants, Fluridone SC inhibits the formation of carotene. In the absence of carotene, chlorophyll is rapidly degraded by sunlight. Herbicidal symptoms of Fluridone SC appear in seven to ten days and appear as white (chlorotic) or pink growing points. Under optimum growing conditions, 30 to 90 days are required before the desired level of aquatic weed management is achieved with Fluridone SC. Species susceptibility to Fluridone SC may vary, depending on time of year, stage of growth, and water movement. For best results, apply Fluridone SC prior to initiation of weed growth or when weeds begin active growth.

Fluridone SC is not corrosive to application equipment.

#### SPECIAL PRECAUTIONS

- \* Do not apply this product through any type of irrigation system.
- \* Obtain required permits. Permits may be required by state or local agencies. Consult with appropriate State or local water authorities before applying this product.
- \* In lakes and reservoirs, do not apply Fluridone SC within one-fourth mile (1320 feet) of any functioning potable water intake.
  - **NOTE:** Existing potable water intakes which are no longer in use, such as those that have been replaced by potable water wells or connections to a municipal water system, are not considered to be functioning potable water intakes.
- \* Irrigation with water treated with Fluridone SC may result in injury to the irrigated vegetation. Those who irrigate from areas treated with Fluridone SC should be informed of the irrigation time frames presented in the table below. These time frames are suggestions which should be followed to reduce the potential for injury to vegetation irrigated with water treated with Fluridone SC.



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# Recommended Waiting Periods Before Irrigating with Water Treated with Fluridone SC (Days After Application)

Application Site	Established Tree Crops	Established Row Crops/ Turf/Plants	Newly Seeded Crops/Seedbeds or Areas to be Planted, Inluding Overseeded Golf Course Greens
Ponds and Static Canals <sup>1</sup>	7	30	30
Canals	7	14	30
Lakes and Reservoirs <sup>2</sup>	7	14	14

<sup>&</sup>lt;sup>1</sup> For purposes of Fluridone SC labeling, a pond is defined as a body of water 10 acres or less in size. A lake or reservoir is greater than 10 acres.

#### WEED CONTROL INFORMATION

#### Vascular Aquatic Plants Controlled by Fluridone SC

#### Floating Plants:

Duckweed, Common (Lemna minor)1

#### **Emersed Plants:**

Spatterdock (Nuphar luteum)

Waterlily (Nymphaea spp.)

#### **Submersed Plants:**

Bladderwort (*Utricularia* spp.)

Coontail, Common (Ceratophyllum demersum)

Elodea, Common (Elodea canadensis)

Egeria, Brazilian Elodea (Egeria densa)

Fanwort, Cabomba (Cabomba caroliniana)

Hydrilla (Hydrilla verticillata)

Naiad (Najas spp.)

Pondweed (Potamogeton spp.), except Illinois pondweed

Watermilfoil (Myriophyllum spp.)

 $Griffin\ L.L.C.$ 

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<sup>&</sup>lt;sup>2</sup> In lakes and reservoirs where one-half or greater of the body of water is treated, use the pond and static canal irrigation restrictions.

<sup>&</sup>lt;sup>1</sup> Controlled only with a surface application of Fluridone SC

#### **Shoreline Grasses:**

Paragrass (Brachiaria mutica)

#### Vascular Aquatic Plants Partially Controlled by Fluridone SC

Alligatorweed (Alternanthera philoxeroides)

Canarygrass, Reed (Philaris arundinaceae)

Cattail (Typha spp.)

Cutgrass, Giant (Zizaniopsis miliacea)

Lotus, American (Nelumbo lutea)

Pondweed, Illinois (Potamogeton illinoensis)

Parrotfeather (Myriophyllum brasiliense)

Smartweed (Polygonum spp.)

Spikerush (*Eleocharis* spp.)

Torpedograss (Panicum repens)

Watergrass, Southern (Hydrochloa caroliniensis)

Watermeal, Common (Wolffia columbiana)<sup>2</sup>

Waterprimrose, Creeping (Ludwigia peploides)

Waterpurslane (Ludwigia palustris)

Watershield (Brasenia schreberi)

#### Vascular Aquatic Plants Not Controlled by Fluridone SC

Algae (Chara and Nitella)

Arrowhead (Sagittaria spp.)

Bacopa (Bacopa spp.)

Big Floatingheart; Banana Lily (Nymphoides aquatica)

Bulrush (Scirpus spp.)

Frogbit, American (Limnobium spongia)

Maidencane (Panicum hemitomon)

Pickerelweed; Lanceleaf (Pontederia cordata)

Rush (*Juncus* spp.)

Tapegrass; American Eelgrass (Vallisneria americana)

Waterhyacinth, Floating (Eichornia crassipes)

Water Lettuce (Pistia stratiotes)

Water Pennywort (*Hydrocotyle umbellata*)

#### MIXING AND APPLICATION DIRECTIONS

The aquatic plants present in the treatment site should be identified prior to application to determine their susceptibility to Fluridone SC. It is also important to determine the area (acres)

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<sup>&</sup>lt;sup>2</sup> Partial control only with a surface application of Fluridone SC at the maximum labeled rate.

to be treated and the average depth in order to select the proper application rate. Do not exceed the maximum labeled rate for a given treatment site per annual growth cycle.

Shake Fluridone SC well before using. Add the recommended amount of Fluridone SC to water in the spray tank during the filling operation. Agitate while filling and during spraying. Surface or subsurface application of the spray can be made with conventional spray equipment. Fluridone SC can also be applied near the surface of the hydrosoil using weighted trailing hoses. A spray volume of 5 to 100 gallons per acre may be used. Fluridone SC may also be diluted with water and the concentrated mix metered into the pumping system.

#### **Application to Ponds**

Fluridone SC may be applied to the entire surface area of a pond. Rates may be selected to provide 0.06 to 0.09 ppm of active ingredient in the treated water. Application rates necessary to obtain these active ingredient concentrations in treated water are shown in the following table. When average water depth of the treatment site is greater than 5 feet, apply 1 to 1.5 quarts of Fluridone SC per treated surface area.

Average Water Depth of Treatment Site (feet)	Quarts of Fluridone SC per Treated Surface Acre
1	0.16 - 0.25
2	0.33 - 0.50
3	0.50 - 0.75
4	0.65 - 1.00
5	0.80 - 1.25

Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control species.

#### **Application to Lakes and Reservoirs**

For best results in lakes and reservoirs, Fluridone SC treatment areas should be a minimum of 5 acres in size. Treatment of areas smaller than 5 acres or treatment of narrow strips, such as boat lanes or shorelines, may not produce satisfactory results due to dilution by untreated water. In lakes and reservoirs, do not apply Fluridone SC within one-fourth mile (1320 feet) of any functioning potable water intake.

Rates may be selected to provide 0.075 to 0.15 ppm of active ingredient in the treated water. Application rates necessary to obtain these active ingredient concentrations in treated water are shown in the following table. When average water depth of the treatment site is greater than 10 feet, apply 3 to 4 quarts of Fluridone SC per treated surface acre.

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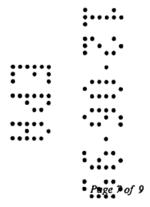
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Average Water Depth of Treatment Site (feet)	Quarts of Fluridone SC per Treated Surface Acre
1	0.2 - 0.4
2	0.4 - 0.8
3	0.6 - 1.2
4	0.8 - 1.6
5	1.0 - 2.0
6	1.2 - 2.4
7	1.4 - 2.8
8	1.6 - 3.2
9	1.8 - 3.6
10	2.0 - 4.0

Use the higher rate within the rate range where there is a dense weed mass or when treating more difficult to control species.

# Use Rates for Control of Eurasian Watermilfoil, Curlyleaf Pondweed and Hydrilla in Whole Lake or Reservoir Treatments

The following application rates may be used for control of Eurasian watermilfoil (*Myriophyllum spicatum*), curlyleaf pondweed (*Potamogeton crispus*) and hydrilla (*Hydrilla verticillata*) when treating lakes or reservoirs where little dilution with untreated water is expected to occur. Under these conditions, Fluridone SC may be applied to provide a concentration of 0.01 ppm to 0.02 ppm (10 to 20 ppb) of active ingredient in treated water for Eurasian watermilfoil and curlyleaf pondweed and 0.015 ppm to 0.02 ppm (15 to 20 ppb) for the control of hydrilla. Application rates necessary to achieve these active ingredient concentrations in treated water are shown in the following table. For optimum control, it is recommended that applications be made early in the growing season.



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Average Water Depth of Treatment	Eurasian V	Fluid ounces of F Vatermilfoil Pondweed	luridone SC per T	reated Surface Acre
Site (feet)	Quarts	Fl. Ounces	<u>Quarts</u>	Fl. Ounces
1	0.027- 0.05	0.87 - 1.6	0.04 - 0.05	1.28 - 1.6
2	0.05 - 0.11	1.6 - 3.5	0.08 - 0.11	2.56 - 3.5
3	0.08 - 0.16	2.56 - 5.12	0.12 - 0.16	3.84 - 5.12
4	0.11 - 0.22	3.5 - 7.4	0.16 - 0.22	5.12 - 7.4
5	0.14 - 0.27	4.48 - 8.64	0.20 - 0.27	6.4 - 8.64
6	0.16 - 0.32	5.12 - 10.24	0.24 - 0.32	7.68 - 10.24
7	0.19 - 0.38	6.08 - 12.16	0.28 - 0.38	8.96 - 12.16
8	0.22 - 0.43	7.04 - 13.76	0.32 - 0.43	10.24 - 13.76
9	0.24 - 0.49	7.68 - 15.68	0.37 - 0.49	11.84 - 15.68
10	0.27 - 0.54	8.64 - 17.28	0.41 - 0.54	13.12 - 17.28

When treated with these use rates, other less susceptible species listed under Aquatic Plants Controlled may exhibit only temporary injury or stunting followed by recovery and normal growth. These 0.01 to 0.02 ppm rates may be applied where functioning potable water intakes are present.

**NOTE:** When applications for management of Eurasian watermilfoil are made to only portions of lakes or reservoirs, such as bays or fingers of these water bodies, the higher rates and use directions listed on this label for Application to Lakes and Reservoirs are recommended.

#### Application Rate Calculation - Ponds, Lakes and Reservoirs

The amount of Fluridone SC to be applied to provide the desired ppm concentration of active ingredient in treated water may be calculated as follows:

Quarts of Fluridone SC required = Average water depth x Desired ppm concentration x 2.7 per treated surface acre of treatment site (feet) of active ingredient

For example, the quarts per acre of Fluridone SC required to provide a concentration of 0.075 ppm of active ingredient in water with an average depth of 5 feet is calculated as follows:

5 x 0.075 x 2.7 = 1.0 quart per treated surface acre.

When measuring quantities of Fluridone SC, quarts may be converted to fluid ounces by multiplying quarts to be measured by 32. For example, 0.25 quarts  $\times$  32 = 8 fluid ounces.

**NOTE:** Calculated rates should not exceed the maximum allowable rate in quarts per treated surface acre for the water depth listed in the application rate table for the site to be treated.

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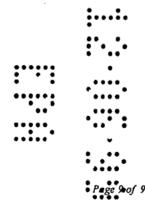
#### Application to Drainage Canals and Irrigation Canals

In drainage and irrigation canals, Fluridone SC should be applied at the rate of 2 quarts per treated surface acre. Where water retention is possible, the performance of Fluridone SC will be enhanced by restricting water flow. In moving bodies of water, use an application pattern that will provide a uniform distribution and avoid concentration of the herbicide.

#### WARRANTY STATEMENT

GRIFFIN warrants that this product conforms to the chemical description on the label thereof and is reasonably fit for purposes stated on such label only when used in accordance with directions under normal use conditions. It is impossible to eliminate all risks inherently associated with use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond the control of GRIFFIN. In no case shall GRIFFIN be liable for consequential, special or indirect damages resulting from the use or handling of this product. All such risks shall be assumed by the Buyer. The exclusive remedy of any buyer or user of this product for any and all losses, injuries, or damages resulting from or in any way arising from the use, handling or application of this product, whether in contract, warranty, tort, negligence, strict liability or otherwise, shall not exceed the purchase price paid for this product or at GRIFFIN'S election, the replacement of this product. GRIFFIN MAKES NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

Griffin and Design are a registered trademark of Griffin Corporation.



Griffin L.L.C.

EPA Reg. No. 1812-xxx

File Name: GX649s99a

DATE OUT: 06/MAR/2000

SUBJECT: PRODUCT CHEMISTRY REVIEW OF MP [ ] EP [X]

DP BARCODE No.: D262765 REG./File Symbol No.: 1812-UGL

816maren 03-06-00

PRODUCT NAME: Fluridone SC

FROM: Shyam Mathur, Chemist

Product Chemistry Team

Technical Review Branch/RD (7505C)

TO: Joanne Miller, PM 23

Herbicide Branch/RD (7505C)

#### INTRODUCTION:

The registrant has submitted the product chemistry data to support the registration of the subject product. The registrant claims that Fluridone SC is substantially similar to the registered product Sonar A.S. (Reg. No. 67690-4), a currently registered product of SePRO Corporation.

#### SUMMARY OF FINDINGS:

- 1. The subject product contains Fluridone technical (Reg. No. 1812-UGA, 99.2%) as the active ingredient with product label claim of 41.70%.
- 2. The CSF for the basic formulation(dated 11-30-99) is filled out correctly and completely in compliance with PR Notice 91-2 and agree with the label claim nominal concentration. The data submitted corresponding to the guideline reference 830.1550(Product Identity) and 830.1750 (Certified limits) satisfy the data requirements of 40CFR§158.155 and 158.175 respectively.
- 3. The data submitted corresponding to the guideline reference 830.1650 (Description of formulation process) and 830.1670 (Discussion on the formation of impurities) satisfy the data requirements of 40CFR158.165 and 158.167 respectively.
- 4. The data submitted corresponding to the guideline reference 830.1800 (Enforcement of analytical method) satisfy the data requirements of 40CFR§158.180. The registrant indicated that, for the determination of the active ingredient Fluridone, The Griffin Analytical Method TM-1235 is used; the details of the method are described in the technical submission [Product chemistry data for the technical Fluridone, 1812-UGA, submitted under Barcode D 262770.

- 5. The data submitted corresponding to the guideline reference Physical state(830.6303), density(830.7300), pH(830.7000), Oxidation/Reduction(830.6314), Flammability(830.6315), Explodability(830.6316), Storage stability (830.6317), Viscosity (830.7100), Miscibility(830.6319), & Dielectric breakdown voltage (830.6321)satisfy the data requirements of 40CFR§158.190.
- <u>6</u>. The registrant must submit the results of corrosion characteristics (830.6320) study carried out on the samples of the test substance stored under warehouse conditions for at least one year. Follow the instructions provided in the new guidelines Series 830 for Product chemistry. Usually the study is done along with one year storage stability (830.6317).

#### **CONCLUSIONS:**

The TRB has reviewed the product chemistry data submitted for the subject end-use-product and has concluded that:

- 1. The CSF for the basic formulation (dated 11-30-99) is filled out correctly and completely in compliance with PR Notice 91-2 and agree with the label claim nominal concentration. The data submitted corresponding to the guideline reference 830.1550 (Product Identity) and 830.1750 (Certified limits) satisfy the data requirements of 40CFR§158.155 and 158.175 respectively. The CSF for basic formulation is acceptable.
- <u>2</u>. The data submitted corresponding to the guideline reference 830.1650 (Description of formulation process) and 830.1670 (Discussion on the formation of impurities) satisfy the data requirements of 40CFR158.165 and 158.167 respectively and are acceptable.
- <u>3</u>. The data submitted corresponding to the guideline reference 830.1800(Enforcement of analytical method)satisfy the data requirements of 40CFR§158.180 and are acceptable.
- 4. The data submitted corresponding to the guideline reference Physical state(830.6303), density(830.7300), Oxidation /Reduction (830.6314), Explodability(830.6316), Storage stability (830.6317), Viscosity(830.7100), Miscibility(830.6319), Dielectric breakdown voltage(830.6321)satisfy the data requirements of 40CFR§158.190 and are acceptable.
- $\underline{\mathbf{5}}$ . The corrosion characteristics (830.6320) study report must be submitted to the Agency.
- 6. The end-use product Fluridone SC(Reg. No. 1812-UGL) is determined to be substantially similar to the registered product Sonar S.A (Reg. No. 67690-4) from the chemical composition point of view. The physical-chemical properties of the two products are very similar.
- 7. The registration of the end use product Fluridone SC(Reg. No. 1812-UGL) is subject to the approval and registration of Fluridone technical (Reg. No. 1812-UGA), which is under process of registration with the Agency.

	UCT CHEMISTRY REVIEW OF MP [ ] EP [X] ARCODE No.: D262765 REG./File Symbol No.: 1812-UGL
PRODU	UCT NAME: Fluridone SC: 03-06-00
1.	Reviewer: S.B.Mathur 2. Company: Griffin L.L.C
3.	Type of Submission: Registration [X] Reregistration []  New [X] Resubmission [] Amendment [] "ME-TOO" [X]  Alternate Formulation [] Experimental Use Permit []  Other (Specify)
4.	If "Me-TOO" Registration, this product is [X] is not [] similar or substantially similar to EPA's Reg. No.: 67690-4
	If not, comment in Confidential Appendix A on the differences between the registered and the new source where significant
CONF	IDENTIAL STATEMENT OF FORMULA
5.	Type of formulation and the sources of active ingredients:  • Non-integrated formulation system
	: the Fluridone technical(1812-UGA)is under process of
regia	stration with the Agency.
6.	• Integrated formulation system
	Formulation intended for food use under 40CFR§180.1001:  • yes [] • no [X] • Some are cleared, others are not []  Cleared under list: • c[] • d[] • e []  Are there any limitations for use as an inert under 40CFR§180.  1001?  • yes [] • no [], If yes, specify
6 (h)	Formulation intended for non-food use:
υ (D)	• yes [X] • no [] • Some are cleared, others are not []
6 (c)	Clearance by the FDA of certain formulations under 21CFR§170 to 199. Examples: (a) indirect food additives, such as food contact surface sanitizers; adhesives, coatings, paper and paperboard products that may contact food in packaging or holding; and (b) substances generally recognized as safe (GRAS).
• ye	s [] • no [] • Some are cleared, others are not [] If yes, the entire formulation is cleared under 21CFR§

7.	The density, pH, and flammal	oility values given on the CSF are
	identical with those of GRN	830.7300(density), 830.7000(pH),
	and 830.6315(Flammability),	respectively:
	• yes [X]	• no [ ]

8. The nominal concentrations (NC) of the active ingredients and the upper and lower certified limits (UCL & LCL) are as follows:

		% <u>k</u>	<u>oy wei</u>	<u>ght</u>
Active ingredient(s)		NC	UCL	LCL
Technical Fluridone (99.2%)	1812-UGA	42.0 (41.7)	42.95	40.45

- 10. The certified limits are within the standard limits as per 40 CFR\$158.175 or are adequately explained if different:

   yes [X]

   no []

#### PRODUCT LABEL

- 11. The chemical names of the active ingredients on the label are
  identical to those on the CSF: yes [X] no [ ]
- 13. The storage and disposal instructions for the pesticide and container are in compliance with PR Notice 84-1 for household use products or PR Notice 83-3 for all other uses:

  yes [X]
  no []

#### PRODUCT CHEMISTRY DATA (SERIES 830. Subgroup A & Subgroup B)

14. Chemical IDs/Manufacture/ Analytical Information New Guideline:830	Data Required Fulfilled	MRID No.
1550.(61-1)Chemical Identity(CSF)	Y	11-30-99
1600.(61-2a) Beginning Materials 1620.(61-2b) Formulation Process	Y	449859-01
1670.(61-3) Discussion of Impurities	Y	н п
1700.(62-1) Preliminary Analysis	NA	
1750.(62-2) Certified Limits(CSF)	Y	11-30-99
1800.(62-3)Enforcmnt. of Anal.Method	Y	449838-02 449838-03

15. <u>Physical/Chemical</u> <u>Properties</u> New Guideline No. 830	Data Required Fulfille d	Value or Qualitat. Descrip.	MRID No.
6303.(63-3)Physical State	Y	V.Liquid	449859-01
7300.(63-7)Density/Bulk Den.	Y	1.12 g/ml	ir n
7000.(63-12) pH	Y	6.80	11 11
6314.(63-14)Oxid/Red Action	Y	None	н н
6315.(63-15a)FlammFlsh Pt.	NA		11 11
6315.(63-15b) Flame Exten.	NA		
6316.(63-16)Explodability	NA		
6317.(63-17)Storage Stablty.	PR 92-5		
7100.(63-18)Viscosity	Y	780 cPs	11 11
6319.(63-19) Miscibility	NA		
6320.(63-20)Corrosion Charac	Ū	Note 1	11 11
6321.(63-21)Dielec.Bkd.Vltg	NA	lana Nati Cultillada N	

Explanations: Y = The Requirements Were Fulfilled; N = The Requirements Were Not Fulfilled; NA = Not Applicable; G = Data Gap; U = Requires Upgrading; I = Incomplete or In Progress; W = Waived.

Note 1: The study must be conducted with the TS stored under warehouse conditions for at least one year.



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

# TECHNICAL REVIEW BRANCH SIMILARITY CLINIC DETERMINATION

03/MAR/2000

Subject:

EPA Reg. No./File Symbol:

1812-UGL

Fluridone SC

DP Barcode:

D262766 066364

Case No:

066364

PC Code:

112900

From:

Eugenia McAndrew, Biologist  $\zeta_{N}$ 

**Technical Review Branch** 

Registration Division (7505 C)

To:

Daniel Kenny, PM Team 23

Herbicide Branch

Registration Division (7505 C)

Applicant:

Griffin L.L.C.

P.O. Box 1847

Valdosta, Georgia 31603-1847

**ACTION REQUESTED:** TRB has been asked to determine if File Symbol No. 1812-UGL, Fluridone SC, is substantially similar to EPA Reg. No. 67690-4, Sonar A.S.

**RECOMMENDATIONS:** We have evaluated the formulations of File Symbol No. 1812-UGL and EPA Reg. No. 67690-4 and have found them to be toxicologically similar. The new product should have the same precautionary and first aid labeling as the cited product.

This memorandum pertains only to the decision concerning whether the subject product is similar to the cited product from an acute toxicological view point. For the purposes of this action, TRB has made no determination of the adequacy of the toxicological data base or the precautionary label of the cited product.



December 3, 1999

Ms. Joanne I. Miller (23)
Document Processing Desk (APPL)
Registration Division (H7505C)
U.S. Environmental Protection Agency
Room 266A, Crystal Mall No. 2
1921 Jefferson Davis Highway
Arlington, Virginia 22202

Dear Ms. Miller:

SUBJECT: APPLICATION FOR "ME-TOO" PESTICIDE REGISTRATION

REQUEST EXPEDITED REVIEW

FLURIDONE SC (EPA REG. NO. 1812-\_\_\_\_)

CITE-ALL METHOD OF SUPPORT

The undersigned, GRIFFIN L.L.C., does hereby make application for a "Me-Too" pesticide registration for Fluridone SC, an end-use aquatic herbicide containing 41.7% fluridone (1-methyl-3-phenyl-5-[3-(trifluoromethyl)phenyl]-4(1*H*)-pyridinone). This product is also referred to as GX-649 in Griffin research studies. Fluridone SC is substantially similar to Sonar A.S. (EPA Reg. No. 67690-4), a currently registered product of SePRO Corporation. Griffin is using the cite-all method of support for this registration.

Enclosed in the Administrative Materials are: one (1) Application for Pesticide Registration, five (5) copies of proposed labeling, one (1) Confidential Statement of Formula, one (1) Certification with Respect to Citation of Data (with Data Matrix), and one letter offering to pay data compensation.

Also submitted herewith to satisfy the respective guideline requirements are three separately bound copies of the following document:

Guideline <u>Number</u>	Document <u>Number</u>	Name of Study	
830.1550 - 830.1900 & 830.6302 - 830.7300	P99-036	Fluridone SC Product Chemistry Da	ta 44985901

December 3, 1999 Page 2

Griffin Analytical Method TM-1235: Fluridone in Technical and Formulated Product by GLC is included with the registration application for Technical Fluridone being submitted concurrently.

We trust that the Agency will find this application to register Fluridone SC to be complete and acceptable.

Should you require any additional information, please contact me at 912-293-4242, Extension 1104.

Sincerely,

GRIFFIN L.L.C.

W. A. Hawkins, Jr., Ph.D.

Registration Manager, Copper Products

and State Affairs

## U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs

GRIFFIN CORP P.O. BOX 1847 VALDOSTA, GA 316031847

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your transmittal of 12/06/99. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.

Please	read	instructions	on	reverse	before	completing	form.

Form	Approved.	OMR	No	2070-006



#### **United States Environmental Protection Agency**

XX	Registration
	Amendment
	Other

OPP Identifier Number

	Washin	ngton, DC 204	60		Other	266/05
No object to the season of	Decelo Propin	Applicatio	n for Pesticio	e - Sectio	n I	michael of Committee of Committee
1. Company/Product Number			roduct Manage	1/	3. Proposed Classification	
4. Company/Product (Name)	Fluridone SC		PM# 2	3		None Restricted
5. Name and Address of App Griffin L.L.C P.O. Box 1847 Valdosta, GA		de)	(b)(i), m to: EPA R		67690-4	e with FIFRA Section 3(c)(3) al in composition and labeling
TO SEE PRODUCTION OF SERVICE			Section - I			
Amendment - Explain Resubmission in resp Notification - Explain Explanation: Use addition	onse to Agency letter below.			Final printed la Agency letter of "Me Too" App Other - Explain	lication.	o
			Section - II			
1. Material This Product Will	De Deckand In		Section - II			
Child-Resistant Packaging Yes* No Certification must be submitted	Unit Packaging Yes XX No  If "Yes" Unit Packaging wgt.	No. per container	Water Soluble Portion Yes  XX No  If "Yes"  Package wgt	No. per container	XX	ontainer  Metal Plastic Glass Paper Other (Specify)
3. Location of Net Contents	Information	4. Size(s) Ret		5.	Location of Label	Directions g accompanying product
6. Manner in Which Label is		XX Lithog Paper Stenci	1 Gallon reph glued led	Other _	On Cabellin	g accompanying product
	TO SECURITY AND ADDRESS.	HED TO BE	Section - I	1		
1. Contact Point   Complete Name W.A. Hawkins,		for identificatio	Title	contacted, if i	: 1	ess this application.) elephone No. (Include Area Code) 2-293-4242 x . 1104
I certify that the state I acknowledge that ar both under applicable	ny knowingly false or r		all attachments the			
2. Signature 21, a. Hawkins, fr.			3. Title  Registration Manager			
4. Typed Name  W.A. Hawkins Jr.			5. Date 12/3/99			

#### PAPERWORK REDUCTION ACT NOTICE and INSTRUCTIONS

PAPERWORK REDUCTION ACT NOTICE: Public reporting burden for this collection of information is estimated to average 0.85 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, (2136), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.

INSTRUCTIONS: This form is to be used for all applications for new registration, end use reregistration, amendment, resubmission, to applications for notifications, final printed labeling, reregistration, etc. In order to process an application for a new registration submitted on this form, the following material must accompany the application:

- 1. Certification with Respect to Citation of Data (EPA Form 8570-29). [If not exempted by 40 CFR 152.81 (b) (4)];
- 2. Confidential Statement of Formula (EPA Form 8570-4);
- 3. Formulator's Exemption Statement (EPA Form 8570-27);
- 4. Five copies of draft labeling;
- 5. Three copies of any date submitted;
- 6. Authorization letter where applicable;
- 7. Matrices where applicable.

Submission of Labeling - Labeling should first be submitted in the form of draft labels with all applications for new registration. Such draft labels may be in the form of typed label text on 8.5 x 11 inch paper for submission or a mockup of the proposed label. If prepared for mockup, it should be constructed in a way as to facilitate storage in an 8.5 x 11 inch file. Mockup labels significantly smaller than 8.5 x 11 inches should be mounted or x 11 inch paper for submission.

Submission of Data - Data submitted in support of this application must be submitted in accordance with PR Notice 86-5.

SPECIFIC INSTRUCTIONS: Please read the instructions listed below before completing this application. First determine the type of registration action, listed in Block A, for which you are submitting this application. For applications submitted in connection with New Registration actions, Sections I, III, and IV must be completed by the applicant. For applications submitted in connection with amended reregistration actions, resubmissions, notifications, reregistrations, etc., Sections I, II, and IV must be completed by the applicant. Block A - Check the appropriate action for which you are submitting this form.

SECTION I - This section must be completed, as applicable, for all registration actions.

- 1. Company/Product Number Insert your Company Number, if one has been assigned by EPA. This number may have been assigned to you as a basic registrant, a distributor, or as an establishment. If your product is registered, insert the Product Number.
- EPA Product Manager If known, fill in the name and PM number of the EPA Product Manager.
- 3. Proposed Classification Specify the proposed classification of this product.
- 4. Product Name Enter the complete product name of this pesticide as it will appear on the label. The name must be specific to this product only. Duplication of names is not permitted among products of the same company. Do not include any brand name or company line designations.
- 5. Name and Address of Applicant The name of the firm or person and address shown in your application is the person or firm to whom the registration will be issued. If you are acting in behalf of another party, you must submit authorization from that party to act for them in registration matters. An applicant not residing in the United States must have an authorized agent residing in the United States to act for them in all registration matters. The name and complete mailing address of such an agent must accompany this application.
- 6. Expedited Review FIFRA section 3 (c) 3 (B) provides for expedited review of applications for registration, or amendments to existing registration that are similar or identical to other pesticide products that are currently registered with the EPA. In order for your application to be eligible for expedited review, you must provide us with the EPA Registration Number and product name of the product you believe is similar to or identical to your product. The product must be similar or identical in both formulation and labeled uses.

SECTION II - This section must be completed for all applications submitted to amend the registration only of a currently registered product (Amendment), for a resubmission in response to an Agency letter, for notifications to the Agency, for the submission of final printed labeling, for reregistration and for any other action that pertains to a specific EPA-registered product. This section is not to be used for a new application for registration.

1. Subject of submission - Check the applicable block and provide the Agency letter date if appropriate. Provide a brief explanation of the purpose(s) for the submission, such as "the addition of a site, pest or crop (specify)"; "amend the Confidential Statement of Formula by..."; "reregistration submission"; "general label revision of use directions." Attach a separate page if additional space is needed.

SECTION III (Packaging and Container Information) - This Section must be completed for all applications submitted in connection with new registration or applicable amendments.

- 1. Type of Packaging Check the appropriate block if your product will be packaged in the indicated packaging types. Indicate the size of the individual packets and number per retail container.
- 2. Type of Retail Container Indicate type of container in which product will be marketed.
- 3. Location of New Contents Indicate the location of the net contents information for your product.
- 4. Size(s) of Retail Container Specify the net contents of all retail containers for your product.

  5. Location of Use Directions Indicate the location of the use directions for your product.
- 6. Manner in which label is affixed to product Indicated the method product label is attached to retail container.

SECTION IV (Contact Point) - This Section must be completed for all applications for Registration actions, i.e., new products registration, resubmission, "me-too," reregistration, etc.

- 1-5. Self-explanatory.
- 6. EPA Use Only.



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 1.25 hours per response for registration and 0.25 hours per response for reregistration and special review activities, including time for reading the instructions and completing the necessary forms. Send

comments regarding burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460.  Do not send the completed form to this address.							
Certification with Respect to Citation of Data							
Applicant's/Registrant'sName, Address, and Telephone Number 912-293-4242x.1104 EPA Registration Number/File Symbol 1812-46t 435							
Active Ingredient(s) and/or representative test compound(s) Fluridone (CAS#59756-60-4)	Date 12/3/99						
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158)  Aquatic Food Crop, Aquatic Noncrop	Product Name Fluridone SC						
IOTE: If your product is a 100% repackaging of another purchased EPA-registered product labeled for submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).							
I am responding to a Data-Call-In Notice, and have included with this form a list of companies see be used for this purpose).	ent offers of compensation (the Data Matrix form should						
SECTION I: METHOD OF DATA SUPPORT (Check one m	ethod only)						
X a list of companies sent offers of compensation (the Data Matrix form under the	g the selective method of support (or cite-all option selective method), and have included with this form a d list of data requirements (the Data Matrix form must be						
SECTION II: GENERAL OFFER TO PAY							
[Required if using the cite-all method or when using the cite-all option under the selective method to satis	fy one or more data requirements]						
X I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this	application, to the extent required by FIFRA.						
SECTION III: CERTIFICATION							
I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.							
I certify that for each exclusive use study cited in support of this registration or reregistration, the written permission of the original data submitter to cite that study.	I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.						
I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I anythe original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (I) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.							
I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.							
I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I actnowlib ge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.  • • •							
Signature 21, a. Hawkins J.  Date 12/3/99	Typed or Printed Name and Title W.A. Hawkins, Jr. Registration Manager						

#### VIA CERTIFIED MAIL



December 3, 1999

Registration Manager Dow AgroSciences 9330 Zionsville Road Indianapolis, Indiana 46268-1054

To Whom It May Concern:

Griffin L.L.C., 2509 Rocky Ford Road, Valdosta, Georgia 31601 intends to apply for registration for a new end-use aquatic herbicide, Fluridone SC, containing fluridone as the active ingredient. We will support our registration application by use of the "cite-all" method of data citation as more fully described in 40 CFR Sections 152.86 and 152.93. DowElanco is listed on the current "Listing of Pesticide Data Submitters" at EPA as a company that has submitted data to support registration of fluridone.

We hereby offer to pay compensation to the extent required by FIFRA Section 3(c)(1)(F) for each pertinent compensable study and offer to commence negotiations to determine the amount and terms of compensation, if any, to be paid.

Please identify within 60 days of receipt of this notice the pertinent studies for which you believe compensation is due.

Should you require any additional information, please contact me at 912-293-4242, Extension 1104.

Sincerely,

GRIFFIN L.L.C.

W. A. Hawkins, Jr., Ph.D.

Registration Manager, Copper Products

and State Affairs

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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY 401 M Street, S.W. WASHINGTON, D.C. 20460

Paperwork Reduction Act Notice: The public reporting burden for this collection of information is estimated to average 0.25 hours per response for registration activities and 0.25 hours per response for registration activities, including time for reading the instructions and completing the necessary forms. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Information Management Division (2137), U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, DC 20460. Do not send the form to this address.

send the form to this address.		<del> </del>			
		DATA MATRIX			
Date December 3, 1999		EPA Reg No./File Symbol 1812-UGL		Pagel of l	
Applicant's/Registrant'sName & Address Griffin L.L.C. P.O.Box 1847 Valdosta, GA 31603-1847			Product Fluridone SC		
Guideline Reference Number	. Guideline Study Name	MRID Number	Submitter	Status	Note
CITE-ALL			Dow Elanco	PAY	
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			<del></del>		
Signature 21, a. Hawkins			kins, Jr. ition Manager	Date 12/3/99	
EBA Form 8570 35 (0.07) E	lastronia and Banks varniana quailable. Submit anty Banas va		<u>. I</u>	Agangu Internal Hea Con	

EPA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only Paper version.

#### **ADMINISTRATIVE MATERIALS**

#### APPLICATION TO REGISTER A NEW PESTICIDE PRODUCT

#### **FLURIDONE SC**

EPA REG. NO. 1812-<u>//</u>G/

#### **DATE SUBMITTED**

**DECEMBER 3, 1999** 

#### **SUBMITTED BY**

GRIFFIN L.L.C. P.O. BOX 1847 VALDOSTA, GEORGIA 31603-1847 FIT

# B

#### GRIFFIN L.L.C. DECEMBER 3, 1999

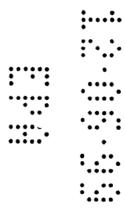
#### CONTENTS OF SUBMISSION

#### "Me-Too" Application to Register Technical Fluridone

- A. Administrative Materials
- B. Three copies each of the following:
  - 1. Transmittal Document
  - 2. Griffin Technical Fluridone Product Identity and Composition
  - 3. Griffin Technical Fluridone Analysis and Certification of Product Ingredients
  - 4. Griffin Analytical Method TM-1235: Fluridone in Technical and Formulated Product by GLC
  - 5. Griffin Analytical Method TM-1243: Fluridone Impurities by GC/MS
  - 6. Technical Fluridone Physical and Chemical Properties

#### m / "Me-Too" Application to Register the End-Use Aquatic Herbicide Fluridone SC

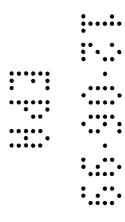
- A. Administrative Materials
- B. Three copies each of the following:
  - 1. Transmittal Document
  - 2. Fluridone SC Product Chemistry Data



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Certification with Respect to Citation of Data (with Data Matrix)	Not Paginated
Offer to Pay Data Compensation	Not Paginated





#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

12/08/99

W.A. HAWKINS, JR.
GRIFFIN L.L.C.
P.O. BOX 1847
VALDOSTA GA 316031847

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

PRODUCT NAME: FLURIDONE SC COMPANY NAME: GRIFFIN L.L.C.

OPP IDENTIFICATION NUMBER: 266705

EPA FILE SYMBOL: 1812-UGL EPA RECEIPT DATE: 12/06/99

SUBJECT: RECEIPT OF APPLICATION FOR A NEW ME-TOO REGISTRATION

#### DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for a new 'me-too' registration and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Joanne Miller, Product Manager 23, at (703)-305-7830.

Sincerely,

A Ulrice

Front End Processing Staff

Information Services Branch

Information Resources and Services Division

Pages 90-95 \*Confidential Statement of Formula may be entitled to confidential treatment\*